

Article

Extracting the Interfacial Electrostatic Features from Experimentally Determined Antigen and/or Antibody-Related Structures inside Protein Data Bank for Machine Learning-Based Antibody Design: Supplementary Materials

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No.	PDB ID	Structure Title
1	1A14	Complex between nc10 anti-influenza virus neuraminidase single chain antibody with a 5 residue linker and influenza virus neuraminidase
2	1A2Y	Hen egg white lysozyme, d18a mutant, in complex with mouse monoclonal antibody d1.3
3	1A7L	Dominant b-cell epitope from the pres2 region of hepatitis b virus in the form of an inserted peptide segment in maltodextrin-binding protein
4	1A7N	Fv fragment of mouse monoclonal antibody d1.3 (balb/c, igg1, k) variant for chain l glu81->asp and chain h leu312->val
5	1A7O	Fv fragment of mouse monoclonal antibody d1.3 (balb/c, igg1, k) r96l deletion mutant on variant for chain l glu81->asp and chain h leu312->val
6	1A7P	Fv fragment of mouse monoclonal antibody d1.3 (balb/c, igg1, k) engineered mutant pro95l->ser on variant chain l glu81->asp and chain h leu312->val
7	1A7Q	Fv fragment of mouse monoclonal antibody d1.3 (balb/c, igg1, k) high affinity expressed variant containing ser26l->gly, ile29l->thr, glu81l->asp, thr97l->ser, pro240h->leu, asp258h->ala, lys281h->glu, asn283h->asp and leu312h->val
8	1A7R	Fv fragment of mouse monoclonal antibody d1.3 (balb/c, igg1, k) variant chain l glu81->asp
9	1ADQ	Crystal structure of a human igm rheumatoid factor fab in complex with its autoantigen igg fc
10	1BJ1	Vascular endothelial growth factor in complex with a neutralizing antibody
11	1BLN	Anti-p-glycoprotein fab mrk-16
12	1BQL	Structure of an anti-hel fab fragment complexed with bobwhite quail lysozyme
13	1BVK	Humanized anti-lysozyme fv complexed with lysozyme
14	1C08	Crystal structure of hyhel-10 fv-hen lysozyme complex
15	1C12	Insight in odorant perception: the crystal structure and binding characteristics of antibody fragments directed against the musk odorant traseolide
16	1CE1	1.9a structure of the therapeutic antibody campath-1h fab in complex with a synthetic peptide antigen
17	1CFS	Anti-p24 (hiv-1) fab fragment cb41 complexed with an epitope-unrelated peptide
18	1CFT	Anti-p24 (hiv-1) fab fragment cb41 complexed with an epitope-unrelated d-peptide
19	1CG9	Complex recognition of the supertypic bw6-determinant on hla-b and-c molecules by the monoclonal antibody sfr8-b6
20	1CLO	Anti-carcinoembryonic antigen monoclonal antibody a5b7
21	1CLY	Igg fab (human igg1, kappa) chimeric fragment (cbr96) complexed with lewis y nonoate methyl ester
22	1CLZ	Igg fab (igg3, kappa) fragment (mbr96) complexed with lewis y nonoate methyl ester
23	1CS9	Solution structure of cggirgera in contact with the monoclonal antibody mab 4x11, nmr, 7 structures
24	1CT6	Solution structure of cggirgerg in contact with the monoclonal antibody mab 4x11, nmr, 11 structures
25	1CVQ	Solution structure of the analogue retro-inverso mgregriggc in contact with the monoclonal antibody mab 4x11, nmr, 7 structures
26	1CW8	Solution structure of the analogue retro-inverso (ma-r)regriggc in contact with the monoclonal antibody mab 4x11, nmr, 6 structures
27	1CWZ	Solution structure of the analogue retro-inverso (ma-s)regriggc in contact with the monoclonal antibody mab 4x11, nmr, 7 structures
28	1CZ8	Vascular endothelial growth factor in complex with an affinity matured antibody
29	1DBJ	Molecular basis of cross-reactivity and the limits of antibody-antigen complementarity
30	1DBK	Molecular basis of cross-reactivity and the limits of antibody-antigen complementarity
31	1DBM	Molecular basis of cross-reactivity and the limits of antibody-antigen complementarity
32	1DEE	Structure of s. aureus protein a bound to a human igm fab
33	1DLF	High resolution crystal structure of the fv fragment from an anti-dansyl switch variant antibody igg2a(s) crystallized at ph 5.25
34	1DQD	Crystal structure of fab hgr-2 f6, a competitive antagonist of the glucagon receptor
35	1DQJ	Crystal structure of the anti-lysozyme antibody hyhel-63 complexed with hen egg white lysozyme
36	1DQM	Crystal structure of anti-lysozyme antibody
37	1DQQ	Crystal structure of anti-lysozyme antibody hyhel-63
38	1DVF	Idiotopic antibody d1.3 fv fragment-antiidiotopic antibody e5.2 fv fragment complex
39	1DZB	Crystal structure of phage library-derived single-chain fv fragment 1f9 in complex with turkey egg-white lysozyme
40	1E07	Model of human carcinoembryonic antigen by homology modelling and curve-fitting to experimental solution scattering data
41	1E4W	Crossreactive binding of a circularized peptide to an anti-tgfalpha antibody fab-fragment
42	1E4X	Crossreactive binding of a circularized peptide to an anti-tgfalpha antibody fab-fragment
43	1E6J	Crystal structure of hiv-1 capsid protein (p24) in complex with fab13b5
44	1E6O	Crystal structure of fab13b5 against hiv-1 capsid protein p24
45	1EJO	Fab fragment of neutralising monoclonal antibody 4c4 complexed with g-h loop from fmdv.
46	1EMT	Fab antibody fragment of an c60 antifullerene antibody
47	1ETZ	The three-dimensional structure of an anti-sweetener fab, nc10.14, shows the extent of structural diversity in antigen recognition by immunoglobulins
48	1F11	F124 fab fragment from a monoclonal anti-pres2 antibody
49	1F2X	Structure of the single-domain camelid antibody cab-ca05
50	1F3R	Complex between fv antibody fragment and an analogue of the main immunogenic region of the acetylcholine receptor
51	1F4W	Crystal structure of an anti-carbohydrate antibody directed against vibrio cholerae o1 in complex with antigen
52	1F4X	Crystal structure of an anti-carbohydrate antibody directed against vibrio cholerae o1 in complex with antigen
53	1F4Y	Crystal structure of an anti-carbohydrate antibody directed against vibrio cholerae o1 in complex with antigen
54	1F8T	Fab (lnkb-2) of monoclonal antibody, crystal structure

55	1F90	Fab fragment of monoclonal antibody (lnkb-2) against human interleukin-2 in complex with antigenic peptide
56	1FBI	Crystal structure of a cross-reaction complex between fab f9.13.7 and guinea-fowl lysozyme
57	1FCC	Crystal structure of the c2 fragment of streptococcal protein g in complex with the fc domain of human igg
58	1FDL	Crystallographic refinement of the three-dimensional structure of the fab d1.3-lysozyme complex at 2.5-angstroms resolution
59	1FJ1	Lyme disease antigen ospa in complex with neutralizing antibody fab la-2
60	1FRG	Crystal structure, sequence, and epitope mapping of a peptide complex of an anti-influenza ha peptide antibody fab 26(/s)9: fine-tuning antibody specificity
61	1FUJ	Pr3 (myeloblastin)
62	1FVC	X-ray structures of the antigen-binding domains from three variants of humanized anti-p185-her2 antibody 4d5 and comparison with molecular modeling
63	1FVD	X-ray structures of the antigen-binding domains from three variants of humanized anti-p185-her2 antibody 4d5 and comparison with molecular modeling
64	1FVE	X-ray structures of the antigen-binding domains from three variants of humanized anti-p185-her2 antibody 4d5 and comparison with molecular modeling
65	1G6V	Complex of the camelid heavy-chain antibody fragment cab-ca05 with bovine carbonic anhydrase
66	1G7H	Crystal structure of hen egg white lysozyme (hel) complexed with the mutant anti-hel monoclonal antibody d1.3(vlw92a)
67	1G7I	Crystal structure of hen egg white lysozyme (hel) complexed with the mutant anti-hel monoclonal antibody d1.3 (vlw92f)
68	1G7J	Crystal structure of hen egg white lysozyme (hel) complexed with the mutant anti-hel monoclonal antibody d1.3 (vlw92h)
69	1G7L	Crystal structure of hen egg white lysozyme (hel) complexed with the mutant anti-hel monoclonal antibody d1.3 (vlw92s)
70	1G7M	Crystal structure of hen egg white lysozyme (hel) complexed with the mutant anti-hel monoclonal antibody d1.3 (vlw92v)
71	1G8Q	Crystal structure of human cd81 extracellular domain, a receptor for hepatitis c virus
72	1G9M	Hiv-1 hxhc2 gp120 envelope glycoprotein complexed with cd4 and induced neutralizing antibody 17b
73	1G9N	Hiv-1 yu2 gp120 envelope glycoprotein complexed with cd4 and induced neutralizing antibody 17b
74	1GC1	Hiv-1 gp120 core complexed with cd4 and a neutralizing human antibody
75	1GGB	Major antigen-induced domain rearrangements in an antibody
76	1GGC	Major antigen-induced domain rearrangements in an antibody
77	1GGI	Crystal structure of an hiv-1 neutralizing antibody 50.1 in complex with its v3 loop peptide antigen
78	1GPO	Crystal structure of the rationally designed antibody m41 as a fab fragment
79	1HCV	Llama heavy chain variable domain against alpha subunit of hcg (human chorionic gonadotropin)
80	1HEZ	Antibody-antigen complex
81	1HGD	Binding of influenza virus hemagglutinin to analogs of its cell-surface receptor, sialic acid: analysis by proton nuclear magnetic resonance spectroscopy and x-ray crystallography
82	1HGE	Binding of influenza virus hemagglutinin to analogs of its cell-surface receptor, sialic acid: analysis by proton nuclear magnetic resonance spectroscopy and x-ray crystallography
83	1HGF	Binding of influenza virus hemagglutinin to analogs of its cell-surface receptor, sialic acid: analysis by proton nuclear magnetic resonance spectroscopy and x-ray crystallography
84	1HGG	Binding of influenza virus hemagglutinin to analogs of its cell-surface receptor, sialic acid: analysis by proton nuclear magnetic resonance spectroscopy and x-ray crystallography
85	1HGH	Binding of influenza virus hemagglutinin to analogs of its cell-surface receptor, sialic acid: analysis by proton nuclear magnetic resonance spectroscopy and x-ray crystallography
86	1HGI	Binding of influenza virus hemagglutinin to analogs of its cell-surface receptor, sialic acid: analysis by proton nuclear magnetic resonance spectroscopy and x-ray crystallography
87	1HCJ	Binding of influenza virus hemagglutinin to analogs of its cell-surface receptor, sialic acid: analysis by proton nuclear magnetic resonance spectroscopy and x-ray crystallography
88	1HIL	Structural evidence for induced fit as a mechanism for antigen-antibody recognition
89	1HIM	Structural evidence for induced fit as a mechanism for antibody-antigen recognition
90	1HIN	Structural evidence for induced fit as a mechanism for antibody-antigen recognition
91	1I8I	Crystal structure of dsfv mr1 in complex with the peptide antigen of the mutant epidermal growth factor receptor, egfrviii, at room temperature
92	1I8K	Crystal structure of dsfv mr1 in complex with the peptide antigen of the mutant epidermal growth factor receptor, egfrviii, at liquid nitrogen temperature
93	1I8M	Crystal structure of a recombinant anti-single-stranded dna antibody fragment complexed with dt5
94	1IC4	Crystal structure of hyhel-10 fv mutant(hd32a)-hen lysozyme complex
95	1IC5	Crystal structure of hyhel-10 fv mutant(hd99a)-hen lysozyme complex
96	1IC7	Crystal structure of hyhel-10 fv mutant(hd32a99a)-hen lysozyme complex
97	1IFH	A detailed analysis of the free and bound conformation of an antibody: x-ray structures of anti-peptide fab 17(/s)9 and three different fab-peptide complexes
98	1IGF	Crystal structures of an antibody to a peptide and its complex with peptide antigen at 2.8 angstroms
99	1IND	How the anti-(metal chelate) antibody cha255 is specific for the metal ion of its antigen: x-ray structures for two fab'(/s)hapten complexes with different metals in the chelate
100	1INE	How the anti-(metal chelate) antibody cha255 is specific for the metal ion of its antigen: x-ray structures for two fab'(/s)hapten complexes with different metals in the chelate
101	1IQW	Crystal structure of the fab fragment of the mouse anti-human fas antibody hfe7a
102	1IT9	Crystal structure of an antigen-binding fragment from a humanized version of the anti-human fas antibody hfe7a
103	1J05	The crystal structure of anti-carcinoembryonic antigen monoclonal antibody t84.66 fv fragment

104	1JIO	Crystal structure of hyhel-10 fv mutant ly50f complexed with hen egg white lysozyme
105	1JIP	Crystal structure of hyhel-10 fv mutant ls91a complexed with hen egg white lysozyme
106	1JIX	Crystal structure of hyhel-10 fv mutant ls93a complexed with hen egg white lysozyme
107	1JFQ	Antigen-binding fragment of the murine anti-phenylarsonate antibody 36-71, 'fab 36-71'
108	1JHL	Three-dimensional structure of a heteroclitic antigen-antibody cross-reaction complex
109	1JP5	Crystal structure of the single-chain fv fragment 1696 in complex with the epitope peptide corresponding to n-terminus of hiv-1 protease
110	1JPS	Crystal structure of tissue factor in complex with humanized fab d3h44
111	1JPT	Crystal structure of fab d3h44
112	1JRH	Complex (antibody/antigen)
113	1JTO	Degenerate interfaces in antigen-antibody complexes
114	1JTP	Degenerate interfaces in antigen-antibody complexes
115	1JTT	Degenerate interfaces in antigen-antibody complexes
116	1JV5	Anti-blood group a fv
117	1K6Q	Crystal structure of antibody fab fragment d3
118	1KB5	Murine t-cell receptor variable domain/fab complex
119	1KC5	Crystal structure of antibody pc287 in complex with ps1 peptide
120	1KCR	Crystal structure of antibody pc283 in complex with ps1 peptide
121	1KCS	Crystal structure of antibody pc282 in complex with ps1 peptide
122	1KIP	Fv mutant y(b 32)a (vh domain) of mouse monoclonal antibody d1.3 complexed with hen egg white lysozyme
123	1KIQ	Fv mutant y(b 101)f (vh domain) of mouse monoclonal antibody d1.3 complexed with hen egg white lysozyme
124	1KIR	Fv mutant y(a 50)s (vl domain) of mouse monoclonal antibody d1.3 complexed with hen egg white lysozyme
125	1KTR	Crystal structure of the anti-his tag antibody 3d5 single-chain fragment (scfv) in complex with a oligohistidine peptide
126	1L7I	Crystal structure of the anti-erb2 fab2c4
127	1LK3	Engineered human interleukin-10 monomer complexed to 9d7 fab fragment
128	1M7I	Crystal structure of a monoclonal fab specific for shigella flexneri y lipopolysaccharide
129	1M7D	Crystal structure of a monoclonal fab specific for shigella flexneri y lipopolysaccharide complexed with a trisaccharide
130	1M7I	Crystal structure of a monoclonal fab specific for shigella flexneri y lipopolysaccharide complexed with a pentasaccharide
131	1MCO	Three-dimensional structure of a human immunoglobulin with a hinge deletion
132	1MEL	Crystal structure of a camel single-domain vh antibody fragment in complex with lysozyme
133	1MFA	Structure of a single-chain fv fragment complexed with a carbohydrate antigen at 1.7 angstroms resolution
134	1MFB	High resolution structures of antibody fab fragment complexed with cell-surface oligosaccharide of pathogenic salmonella
135	1MFC	High resolution structures of antibody fab fragment complexed with cell-surface oligosaccharide of pathogenic salmonella
136	1MHH	Structure of p. magnus protein l mutant bound to a mouse fab
137	1MLB	Monoclonal antibody fab d44.1 raised against chicken egg-white lysozyme
138	1MLC	Monoclonal antibody fab d44.1 raised against chicken egg-white lysozyme complexed with lysozyme
139	1N64	Crystal structure analysis of the immunodominant antigenic site on hepatitis c virus protein bound to mab 19d9d6
140	1NBY	Crystal structure of hyhel-63 complexed with hel mutant k96a
141	1NBZ	Crystal structure of hyhel-63 complexed with hel mutant k97a
142	1NDG	Crystal structure of fab fragment of antibody hyhel-8 complexed with its antigen lysozyme
143	1NDM	Crystal structure of fab fragment of antibody hyhel-26 complexed with lysozyme
144	1NGW	Chimeric affinity matured fab 7g12 complexed with mesoporphyrin
145	1NGX	Chimeric germline fab 7g12 with jeffamine fragment bound
146	1NGY	Chimeric mature fab 7g12-apo
147	1NGZ	Chimeric germline fab 7g12-apo
148	1NLB	Crystal structure of anti-hcv monoclonal antibody 19d9d6
149	1NMC	Complex between nc10 anti-influenza virus neuraminidase single chain antibody with a 15 residue linker and influenza virus neuraminidase
150	1OB1	Crystal structure of a fab complex with plasmodium falciparum msp1-19
151	1OP9	Complex of human lysozyme with camelid vhh hl6 antibody fragment
152	1OSP	Crystal structure of outer surface protein a of borrelia burgdorferi complexed with a murine monoclonal antibody fab
153	1OW0	Crystal structure of human fcari bound to iga1-fc
154	1P2C	Crystal structure analysis of an anti-lysozyme antibody
155	1P4B	Three-dimensional structure of a single chain fv fragment complexed with the peptide gcn4(7p-14p).
156	1P7K	Crystal structure of an anti-ssdna antigen-binding fragment (fab) bound to 4-(2-hydroxyethyl)piperazine-1-ethanesulfonic acid (hepes)
157	1PG7	Murine 6a6 fab in complex with humanized anti-tissue factor d3h44 fab
158	1PSK	The crystal structure of an fab fragment that binds to the melanoma-associated gd2 ganglioside
159	1PZ5	Structural basis of peptide-carbohydrate mimicry in an antibody combining site
160	1Q9K	S25-2 fab unliganded 1
161	1Q9L	S25-2 fab unliganded 2
162	1Q9O	S45-18 fab unliganded
163	1Q9W	S45-18 fab pentasaccharide bisphosphate complex
164	1QBL	Fab e8 (fabe8a) x-ray structure at 2.26 angstrom resolution

165	1QBM	Fab e8b antibody, x-ray structure at 2.37 angstroms resolution
166	1QGC	Structure of the complex of a fab fragment of a neutralizing antibody with foot and mouth disease virus
167	1QKZ	Fab fragment (mn14c11.6) in complex with a peptide antigen derived from neisseria meningitidis p1.7 serosubtype antigen and domain ii from streptococcal protein g
168	1QOK	Mfe-23 an anti-carcinoembryonic antigen single-chain fv antibody
169	1R21	Solution structure of human ki67 fha domain
170	1RZJ	Hiv-1 hxbc2 gp120 envelope glycoprotein complexed with cd4 and induced neutralizing antibody 17b
171	1RZK	Hiv-1 yu2 gp120 envelope glycoprotein complexed with cd4 and induced neutralizing antibody 17b
172	1S3K	Crystal structure of a humanized fab (hu3s193) in complex with the lewis y tetrasaccharide
173	1S4H	Nmr structure of cross-reactive peptides from l. braziliensis
174	1S4J	Nmr structure of cross-reactive peptides from homo sapiens
175	1SSI	Fab (lnkb-2) of monoclonal antibody to human interleukin-2, crystal structure
176	1S78	Insights into erbb signaling from the structure of the erbb2-pertuzumab complex
177	1SM3	Crystal structure of the tumor specific antibody sm3 complex with its peptide epitope
178	1SQ2	Crystal structure analysis of the nurse shark new antigen receptor (nar) variable domain in complex with lysozyme
179	1SVZ	Crystal structure of the single-chain fv fragment 1696 in complex with the epitope peptide corresponding to n-terminus of hiv-2 protease
180	1T2Q	The crystal structure of an nna7 fab that recognizes an n-type blood group antigen
181	1T6V	Crystal structure analysis of the nurse shark new antigen receptor (nar) variable domain in complex with lysozyme
182	1TOR	Molecular dynamics simulation from 2d-nmr data of the freeachr mir decapeptide and the antibody-bound [a76]mir analogue
183	1TOS	Torpedo californicaachr receptor [ala76] analogue complexed with the anti-acetylcholine mab6 monoclonal antibody
184	1TYE	Structural basis for allostery in integrins and binding of ligand-mimetic therapeutics to the platelet receptor for fibrinogen
185	1TZH	Crystal structure of the fab yads1 complexed with h-vegf
186	1TZI	Crystal structure of the fab yads2 complexed with h-vegf
187	1U6A	Crystal structure of the broadly neutralizing anti-hiv fab f105
188	1UA6	Crystal structure of hyhel-10 fv mutant sfsf complexed with hen egg white lysozyme complex
189	1UAC	Crystal structure of hyhel-10 fv mutant sfsf complexed with turkey white lysozyme
190	1UCB	Structure of uncomplexed fab compared to complex (1cly, 1clz)
191	1UJ3	Crystal structure of a humanized fab fragment of anti-tissue-factor antibody in complex with tissue factor
192	1UWX	P1.2 serosubtype antigen derived from n. meningitidis pora in complex with fab fragment
193	1UZ6	Anti-lewis x fab fragment uncomplexed
194	1UZ8	Anti-lewis x fab fragment in complex with lewis x
195	1V7M	Human thrombopoietin functional domain complexed to neutralizing antibody tn1 fab
196	1V7N	Human thrombopoietin functional domain complexed to neutralizing antibody tn1 fab
197	1VER	Structure of new antigen receptor variable domain from sharks
198	1VES	Structure of new antigen receptor variable domain from sharks
199	1VFA	Bound water molecules and conformational stabilization help mediate an antigen-antibody association
200	1VFB	Bound water molecules and conformational stabilization help mediate an antigen-antibody association
201	1W72	Crystal structure of hla-a1:mage-a1 in complex with fab-hyb3
202	1WEJ	Igg1 fab fragment (of e8 antibody) complexed with horse cytochrome c at 1.8 a resolution
203	1WZ1	Crystal structure of the fv fragment complexed with dansyl-lysine
204	1XF2	Structure of fab dna-1 complexed with dt3
205	1XGY	Crystal structure of anti-meta i rhodopsin fab fragment k42-411
206	1XIW	Crystal structure of human cd3-e/d dimer in complex with a ucht1 single-chain antibody fragment
207	1YC7	Caban33 vhh fragment against vsg
208	1YC8	Caban33- y37v/e44g/r45l triple mutant
209	1YEI	Catalytic antibody d2.3 complex
210	1YEJ	Catalytic antibody complex
211	1YEK	Catalytic antibody d2.3 complex
212	1YNT	Structure of the monomeric form of t. gondii sag1 surface antigen bound to a human fab
213	1YQV	The crystal structure of the antibody fab hyhel5 complex with lysozyme at 1.7a resolution
214	1YYL	Crystal structure of cd4m33, a scorpion-toxin mimic of cd4, in complex with hiv-1 yu2 gp120 envelope glycoprotein and anti-hiv-1 antibody 17b
215	1YYM	Crystal structure of f23, a scorpion-toxin mimic of cd4, in complex with hiv-1 yu2 gp120 envelope glycoprotein and anti-hiv-1 antibody 17b
216	1YZZ	Humanized caban33 at room temperature
217	1ZEA	Structure of the anti-cholera toxin antibody fab fragment te33 in complex with a d-peptide
218	1ZMY	Cabbcii-10 vhh framework with cdr loops of cablys3 grafted on it and in complex with hen egg white lysozyme
219	2AAB	Structural basis of antigen mimicry in a clinically relevant melanoma antigen system
220	2ARJ	Cd8alpha-alpha in complex with yts 105.18 fab
221	2B2X	Vla1 rdeltah i-domain complexed with a quadruple mutant of the aqc2 fab
222	2B4C	Crystal structure of hiv-1 jr-fl gp120 core protein containing the third variable region (v3) complexed with cd4 and the x5 antibody
223	2BDN	Crystal structure of human mcp-1 bound to a blocking antibody, 11k2
224	2BJM	Spe7:anthrone complex
225	2BRR	Complex of the neisserial pora p1.4 epitope peptide and two fab- fragments (antibody mn20b9.34)

226	2COQ	Structure of new antigen receptor variable domain from sharks
227	2D03	Crystal structure of the g91s mutant of the nna7 fab
228	2DBL	Molecular basis of cross-reactivity and the limits of antibody-antigen complementarity
229	2DLF	High resolution crystal structure of the fv fragment from an anti-dansyl switch variant antibody igg2a(s) crystallized at ph 6.75
230	2DQC	Crystal structure of hyhel-10 fv mutant(hy33f) complexed with hen egg lysozyme
231	2DQD	Crystal structure of hyhel-10 fv mutant (hy50f) complexed with hen egg lysozyme
232	2DQE	Crystal structure of hyhel-10 fv mutant (hy53a) complexed with hen egg lysozyme
233	2DQF	Crystal structure of hyhel-10 fv mutant (y33ay53a) complexed with hen egg lysozyme
234	2DQG	Crystal structure of hyhel-10 fv mutant (hy53f) complexed with hen egg lysozyme
235	2DQH	Crystal structure of hyhel-10 fv mutant (hy58a) complexed with hen egg lysozyme
236	2DQI	Crystal structure of hyhel-10 fv mutant (ly50a) complexed with hen egg lysozyme
237	2DQJ	Crystal structure of hyhel-10 fv (wild-type) complexed with hen egg lysozyme at 1.8a resolution
238	2DQT	High resolution crystal structure of the complex of the hydrolytic antibody fab 6d9 and a transition-state analog
239	2DQU	Crystal form ii: high resolution crystal structure of the complex of the hydrolytic antibody fab 6d9 and a transition-state analog
240	2FB4	Dir primaerstruktur des kristallisierbaren monoklonalen immunoglobulins igg1 kol. ii. aminosaeuresequenz der l-kette, lambda-typ, subgruppe i (german)
241	2FD6	Structure of human urokinase plasminogen activator in complex with urokinase receptor and an anti-upar antibody at 1.9 a
242	2FR4	Structure of fab dna-1 complexed with a stem-loop dna ligand
243	2H32	Crystal structure of the pre-b cell receptor
244	2H9G	Crystal structure of phage derived fab bdf1 with human death receptor 5 (dr5)
245	2HFG	Crystal structure of hbr3 bound to cb3s-fab
246	2HKF	Crystal structure of the complex fab m75- peptide
247	2HMG	Refinement of the influenza virus hemagglutinin by simulated annealing
248	2HQ6	Structure of the cyclophilin_cecyp16-like domain of the serologically defined colon cancer antigen 10 from homo sapiens
249	2HRP	Antigen-antibody complex
250	2I24	Crystal structure analysis of the nurse shark new antigen receptor pbla8 variable domain
251	2I25	Crystal structure analysis of the nurse shark new antigen receptor pbla8 variable domain in complex with lysozyme
252	2I26	Crystal structure analysis of the nurse shark new antigen receptor ancestral variable domain in complex with lysozyme
253	2I27	Crystal structure analysis of the nurse shark new antigen receptor ancestral variable domain
254	2I5Y	Crystal structure of cd4m47, a scorpion-toxin mimic of cd4, in complex with hiv-1 yu2 gp120 envelope glycoprotein and anti-hiv-1 antibody 17b
255	2I60	Crystal structure of [phe23]m47, a scorpion-toxin mimic of cd4, in complex with hiv-1 yu2 gp120 envelope glycoprotein and anti-hiv-1 antibody 17b
256	2IFF	Structure of an antibody-lysozyme complex: effect of a conservative mutation
257	2IG2	Dir primaerstruktur des kristallisierbaren monoklonalen immunoglobulins igg1 kol. ii. aminosaeuresequenz der l-kette, lambda-typ, subgruppe i (german)
258	2IGF	Crystal structures of an antibody to a peptide and its complex with peptide antigen at 2.8 angstroms
259	2IHL	Lysozyme (e.c.3.2.1.17) (japanese quail)
260	2J4W	Structure of a plasmodium vivax apical membrane antigen 1-fab f8.12.19 complex
261	2J5L	Structure of a plasmodium falciparum apical membrane antigen 1-fab f8. 12.19 complex
262	2JB6	Fab fragment in complex with scriptsize molecule hapten, crystal form-2
263	2JEL	Jel42 fab/hpr complex
264	2MCP	Refined crystal structure of the mc/pc603 fab-phosphocholine complex at 3.1 angstroms resolution
265	2MKL	Solution structure of the fourth constant immunoglobulin domain of nurse shark ignar
266	2MTW	Evidence supporting the hypothesis that specifically modifying a malaria peptide to fit into hla-dr 1*03 molecules induces antibody production and protection
267	2NXY	Hiv-1 gp120 envelope glycoprotein(s334a) complexed with cd4 and antibody 17b
268	2NXZ	Hiv-1 gp120 envelope glycoprotein (t257s, s334a, s375w) complexed with cd4 and antibody 17b
269	2NY0	Hiv-1 gp120 envelope glycoprotein (m95w, w96c, t257s, v275c, s334a, s375w, a433m) complexed with cd4 and antibody 17b
270	2NY1	Hiv-1 gp120 envelope glycoprotein (i109c, t257s, s334a, s375w, q428c) complexed with cd4 and antibody 17b
271	2NY2	Hiv-1 gp120 envelope glycoprotein (t123c, t257s, s334a, s375w, g431c) complexed with cd4 and antibody 17b
272	2NY3	Hiv-1 gp120 envelope glycoprotein (k231c, t257s, e267c, s334a, s375w) complexed with cd4 and antibody 17b
273	2NY4	Hiv-1 gp120 envelope glycoprotein (k231c, t257s, e268c, s334a, s375w) complexed with cd4 and antibody 17b
274	2NY5	Hiv-1 gp120 envelope glycoprotein (m95w, w96c, i109c, t257s, v275c, s334a, s375w, q428c, a433m) complexed with cd4 and antibody 17b
275	2NY6	Hiv-1 gp120 envelope glycoprotein (m95w, w96c, i109c, t123c, t257s, v275c,s334a, s375w, q428c, g431c) complexed with cd4 and antibody 17b
276	2NY7	Hiv-1 gp120 envelope glycoprotein complexed with the broadly neutralizing cd4-binding-site antibody b12
277	2OR9	The structure of the anti-c-myc antibody 9e10 fab fragment/epitope peptide complex reveals a novel binding mode dominated by the heavy chain hypervariable loops
278	2ORB	The structure of the anti-c-myc antibody 9e10 fab fragment
279	2OSL	Crystal structure of rituximab fab in complex with an epitope peptide
280	2OTU	Crystal structure of fv polyglutamine complex
281	2OTW	Crystal structure of fv polyglutamine complex

282	2P8L	Crystal structure of the hiv-1 cross neutralizing monoclonal antibody 2f5 in complex with gp41 peptide elleldkwaslwn
283	2P8M	Crystal structure of the hiv-1 cross neutralizing monoclonal antibody 2f5 in complex with gp41 peptide elleldkwaslwn in new crystal form
284	2P8P	Crystal structure of the hiv-1 cross neutralizing monoclonal antibody 2f5 in complex with gp41 peptide leldkwaslw[n-ac]
285	2PR4	Crystal structure of fab' from the hiv-1 neutralizing antibody 2f5
286	2Q8A	Structure of the malaria antigen ama1 in complex with a growth-inhibitory antibody
287	2Q8B	Structure of the malaria antigen ama1 in complex with a growth-inhibitory antibody
288	2QAD	Structure of tyrosine-sulfated 412d antibody complexed with hiv-1 yu2 gp120 and cd4
289	2QQI	Crystal structure of the b1b2 domains from human neuropilin-1
290	2QQM	Crystal structure of the a2b1b2 domains from human neuropilin-1
291	2QQN	Neuropilin-1 b1 domain in complex with a vegf-blocking fab
292	2R29	Neutralization of dengue virus by a serotype cross-reactive antibody elucidated by cryoelectron microscopy and x-ray crystallography
293	2R69	Crystal structure of fab 1a1d-2 complexed with e-diii of dengue virus at 3.8 angstrom resolution
294	2RLL	Ccr5 nt(7-15)
295	2UYL	Crystal structure of a monoclonal antibody directed against an antigenic determinant common to ogawa and inaba serotypes of vibrio cholerae o1
296	2VC2	Re-refinement of integrin alphaiibbeta3 headpiece bound to antagonist l-739758
297	2VDK	Re-refinement of integrin alphaiibbeta3 headpiece
298	2VDL	Re-refinement of integrin alphaiibbeta3 headpiece
299	2VDM	Re-refinement of integrin alphaiibbeta3 headpiece bound to antagonist tirofiban
300	2VDN	Re-refinement of integrin alphaiibbeta3 headpiece bound to antagonist eptifibatide
301	2VDO	Integrin alphaiibbeta3 headpiece bound to fibrinogen gamma chain peptide, hhlggakqagdv
302	2VDP	Integrin alphaiibbeta3 headpiece bound to fibrinogen gamma chain peptide,lggakqagdv
303	2VDQ	Integrin alphaiibbeta3 headpiece bound to a chimeric fibrinogen gamma chain peptide, hhlggakqrgdv
304	2VDR	Integrin alphaiibbeta3 headpiece bound to a chimeric fibrinogen gamma chain peptide, lggakqrgdv
305	2VIR	Influenza virus hemagglutinin complexed with a neutralizing antibody
306	2VIS	Influenza virus hemagglutinin, (escape) mutant with thr 131 replaced by ile, complexed with a neutralizing antibody
307	2VIT	Influenza virus hemagglutinin, mutant with thr 155 replaced by ile, complexed with a neutralizing antibody
308	2VIU	Influenza virus hemagglutinin
309	2VXS	Structure of il-17a in complex with a potent, fully human neutralising antibody
310	2VXT	Crystal structure of human il-18 complexed to murine reference antibody 125-2h fab
311	2VXU	Crystal structure of murine reference antibody 125-2h fab fragment
312	2VXV	Crystal structure of human igg abt-325 fab fragment
313	2XEF	Human glutamate carboxypeptidase ii in complex with antibody- recruiting molecule arm-p8
314	2XEG	Human glutamate carboxypeptidase ii in complex with antibody- recruiting molecule arm-p4
315	2XEI	Human glutamate carboxypeptidase ii in complex with antibody- recruiting molecule arm-p2
316	2XEJ	Human glutamate carboxypeptidase ii in complex with arm-m4, urea- based inhibitor
317	2XZQ	Crystal structure analysis of the anti-(4-hydroxy-3-nitrophenyl)- acetyl murine germline monoclonal antibody bbe6.12h3 fab fragment in complex with a phage display derived dodecapeptide yqlrpnaetlrf
318	2Y06	Crystal structure analysis of the anti-(4-hydroxy-3-nitrophenyl) - acetyl murine germline antibody bbe6.12h3 fab fragment in complex with a phage display derived dodecapeptide gdprpsyishll
319	2Y07	Crystal structure analysis of the anti-(4-hydroxy-3-nitrophenyl) - acetyl murine germline monoclonal antibody bbe6.12h3 fab fragment in complex with a phage display derived dodecapeptide ppypawhapgni
320	2Y36	Crystal structure analysis of the anti-(4-hydroxy-3-nitrophenyl)- acetyl murine germline antibody bbe6.12h3 fab fragment in complex with a phage display derived dodecapeptide dlwttaiptips
321	2Y7S	Structure of a designed meningococcal antigen (factor h binding protein, mutant g1) inducing broad protective immunity
322	2YPV	Crystal structure of the meningococcal vaccine antigen factor h binding protein in complex with a bactericidal antibody
323	2YWY	Structure of new antigen receptor variable domain from sharks
324	2YWZ	Structure of new antigen receptor variable domain from sharks
325	2ZCH	Crystal structure of human prostate specific antigen complexed with an activating antibody
326	2ZCK	Crystal structure of a ternary complex between psa, a substrat-acyl intermediate and an activating antibody
327	2ZCL	Crystal structure of human prostate specific antigen complexed with an activating antibody
328	2ZNW	Crystal structure of scfv10 in complex with hen egg lysozyme
329	2ZNX	5-fluorotryptophan incorporated scfv10 complexed to hen egg lysozyme
330	2ZPK	Crystal structure of p20.1 fab fragment in complex with its antigen peptide
331	32C2	Structure of an activity suppressing fab fragment to cytochrome p450 aromatase
332	3A67	Crystal structure of hyhel-10 fv mutant ln31d complexed with hen egg white lysozyme
333	3A6B	Crystal structure of hyhel-10 fv mutant ln32d complexed with hen egg white lysozyme
334	3A6C	Crystal structure of hyhel-10 fv mutant ln92d complexed with hen egg white lysozyme
335	3AUV	Predicting amino acid preferences in the complementarity determining regions of an antibody-antigen recognition interface
336	3B9K	Crystal structure of cd8alpha-beta in complex with yts 156.7 fab
337	3BDY	Dual specific bh1 fab in complex with vegf
338	3BE1	Dual specific bh1 fab in complex with the extracellular domain of her2/erb-2
339	3BGF	X-ray crystal structure of the sars coronavirus spike receptor binding domain in complex with f26g19 fab

340	3BIK	Crystal structure of the pd-1/pd-l1 complex
341	3BIS	Crystal structure of the pd-l1
342	3BKY	Crystal structure of chimeric antibody c2h7 fab in complex with a cd20 peptide
343	3BO8	The high resolution crystal structure of hla-a1 complexed with the mage-a1 peptide
344	3BT2	Structure of urokinase receptor, urokinase and vitronectin complex
345	3BZ4	Crystal structure of fab f22-4 in complex with a shigella flexneri 2a o-ag decasaccharide
346	3C09	Crystal structure the fab fragment of matuzumab (fab72000) in complex with domain iii of the extracellular region of egfr
347	3C5S	Crystal structure of monoclonal fab f22-4 specific for shigella flexneri 2a o-ag
348	3C6S	Crystal structure of fab f22-4 in complex with a shigella flexneri 2a o-ag pentadecasaccharide
349	3CVH	How tcr-like antibody recognizes mhc-bound peptide
350	3CXD	Crystal structure of anti-osteopontin antibody 23c3 in complex with its epitope peptide
351	3D0L	Crystal structure of the hiv-1 broadly neutralizing antibody 2f5 in complex with the gp41 fp-mper hyb3k construct 514gigalflgflgaags528kk-ahx-655kneqelleldkwaslwn671
352	3D0V	Crystal structure of the hiv-1 cross neutralizing monoclonal antibody 2f5 in complex with gp41 peptide lleldkwaslwn
353	3D9A	High resolution crystal structure structure of hyhel10 fab complexed to hen egg lysozyme
354	3DRO	Crystal structure of the hiv-1 cross neutralizing antibody 2f5 in complex with gp41 peptide elleldkwaslwn grown in ammonium sulfate
355	3DRQ	Crystal structure of the hiv-1 broadly neutralizing antibody 2f5 in complex with the gp41 fp-mper hyb3k construct 514gigalflgflgaags528kk-ahx-655kneqelleldkwaslwn671 soaked in peg/2-propanol solution
356	3DSF	Crystal structure of anti-osteopontin antibody 23c3 in complex with w43a mutated epitope peptide
357	3EBA	Cabhu6 fglw mutant (humanized) in complex with human lysozyme
358	3EOA	Crystal structure the fab fragment of efalizumab in complex with lfa-1 i domain, form i
359	3EOB	Crystal structure the fab fragment of efalizumab in complex with lfa-1 i domain, form ii
360	3ESU	Crystal structure of anthrax-neutralizing single-chain antibody 14b7
361	3ESV	Crystal structure of the engineered neutralizing antibody m18
362	3ET9	Crystal structure of the engineered neutralizing antibody 1h
363	3ETB	Crystal structure of the engineered neutralizing antibody m18 complexed with anthrax protective antigen domain 4
364	3EYV	Anti-lewis y fab fragment with lewis y antigen in the presence of zinc ions
365	3FMG	Structure of rotavirus outer capsid protein vp7 trimer in complex with a neutralizing fab
366	3G39	Structure of a lamprey variable lymphocyte receptor
367	3G3A	Structure of a lamprey variable lymphocyte receptor in complex with a protein antigen
368	3G3B	Structure of a lamprey variable lymphocyte receptor mutant in complex with a protein antigen
369	3GGW	Crystal structure of fab f22-4 in complex with a carbohydrate-mimetic peptide
370	3GHB	Crystal structure of anti-hiv-1 fab 447-52d in complex with v3 peptide w2rw020
371	3GHE	Crystal structure of anti-hiv-1 fab 537-10d in complex with v3 peptide mn
372	3GJF	Rational development of high-affinity t-cell receptor-like antibodies
373	3GNM	The crystal structure of the jaa-f11 monoclonal antibody fab fragment
374	3GO1	Crystal structure of anti-hiv-1 fab 268-d in complex with v3 peptide mn
375	3HAE	Rational development of high-affinity t-cell receptor-like antibodies
376	3HFM	Structure of an antibody-antigen complex. crystal structure of the hy/hel-10 fab-lysozyme complex
377	3HI6	Crystal structure of intermediate affinity i domain of integrin lfa-1 with the fab fragment of its antibody al-57
378	3HMG	Refinement of the influenza virus hemagglutinin by simulated annealing
379	3HZK	Crystal structure of s73-2 antibody in complex with antigen kdo(2.4)kdo
380	3HZM	Crystal structure of s73-2 antibody in complex with antigen kdo
381	3HZV	Crystal structure of s73-2 antibody in complex with antigen kdo(2.8)kdo(2.4)kdo
382	3HZY	Crystal structure of s73-2 antibody in complex with antigen kdo(2.4)kdo(2.4)kdo
383	3I02	Crystal structure of s54-10 antibody in complex with antigen kdo(2.4)kdo(2.4)kdo
384	3I9G	Crystal structure of the lt1009 (sonenpcizumab) antibody fab fragment in complex with sphingosine-1-phosphate
385	3IET	Crystal structure of 237mab with antigen
386	3IF1	Crystal structure of 237mab in complex with a galnac
387	3IJH	Structure of s67-27 in complex with ko
388	3IJS	Structure of s67-27 in complex with tsbp
389	3IJY	Structure of s67-27 in complex with kdo(2.8)kdo
390	3IKC	Structure of s67-27 in complex with kdo(2.8)-7-o-methyl-kdo
391	3IU3	Crystal structure of the fab fragment of therapeutic antibody basiliximab in complex with il-2ra (cd25) ectodomain
392	3IU4	Anti neugcg3 ganglioside chimeric antibody chp3
393	3IVK	Crystal structure of the catalytic core of an rna polymerase ribozyme complexed with an antigen binding antibody fragment
394	3J3O	Conformational shift of a major poliovirus antigen confirmed by immuno-cryogenic electron microscopy: 160s poliovirus and c3-fab complex
395	3J3P	Conformational shift of a major poliovirus antigen confirmed by immuno-cryogenic electron microscopy: 135s poliovirus and c3-fab complex
396	3J5M	Cryo-em structure of the bg505 sosip.664 hiv-1 env trimer with 3 pgv04 fabs
397	3J70	Model of gp120, including variable regions, in complex with cd4 and 17b
398	3JCC	Structure of simian immunodeficiency virus envelope spikes bound with cd4 and monoclonal antibody 36d5
399	3KS0	Crystal structure of the heme domain of flavocytochrome b2 in complex with fab b2b4
400	3L7E	Crystal structure of anti-il-13 antibody c836

401	3LZF	Crystal structure of fab 2d1 in complex with the 1918 influenza virus hemagglutinin
402	3M18	Crystal structure of variable lymphocyte receptor vlra.r2.1 in complex with hen egg lysozyme
403	3M19	Crystal structure of variable lymphocyte receptor vlra.r5.1
404	3MLR	Crystal structure of anti-hiv-1 v3 fab 2557 in complex with a ny5 v3 peptide
405	3MLS	Crystal structure of anti-hiv-1 v3 mab 2557 fab in complex with a hiv-1 gp120 v3 mimotope
406	3MLT	Crystal structure of anti-hiv-1 v3 fab 2557 in complex with a ug1033 v3 peptide
407	3MLU	Crystal structure of anti-hiv-1 v3 fab 2557 in complex with a zam18 v3 peptide
408	3MLV	Crystal structure of anti-hiv-1 v3 fab 2557 in complex with an nof v3 peptide
409	3MLW	Crystal structure of anti-hiv-1 v3 fab 1006-15d in complex with an mn v3 peptide
410	3MLX	Crystal structure of anti-hiv-1 v3 fab 3074 in complex with an mn v3 peptide
411	3MLY	Crystal structure of anti-hiv-1 v3 fab 3074 in complex with a ur29 v3 peptide
412	3MLZ	Crystal structure of anti-hiv-1 v3 fab 3074 in complex with a vi191 v3 peptide
413	3NFP	Crystal structure of the fab fragment of therapeutic antibody daclizumab in complex with il-2ra (cd25) ectodomain
414	3NGB	Crystal structure of broadly and potently neutralizing antibody vrc01 in complex with hiv-1 gp120
415	3NH7	Crystal structure of the neutralizing fab fragment abd1556 bound to the bmp type i receptor ia
416	3NZ8	Crystal structure of the hiv-2 neutralizing fab fragment 7c8
417	3O2D	Crystal structure of hiv-1 primary receptor cd4 in complex with a potent antiviral antibody
418	3O4I	Crystal structure of 101f fab bound to 15-mer peptide epitope
419	3O45	Crystal structure of 101f fab bound to 17-mer peptide epitope
420	3OJD	Anti-indolicidin monoclonal antibody v2d2 (fab fragment)
421	3P0V	Anti-egfr/her3 fab dl11 alone
422	3P0Y	Anti-egfr/her3 fab dl11 in complex with domain iii of egfr extracellular region
423	3P11	Anti-egfr/her3 fab dl11 in complex with domains i-iii of the her3 extracellular region
424	3PGF	Crystal structure of maltose bound mbp with a conformationally specific synthetic antigen binder (sab)
425	3PNW	Crystal structure of the tudor domain of human tdrd3 in complex with an anti-tdrd3 fab
426	3PP4	Epitope characterization and crystal structure of ga101 provide insights into the molecular basis for the type i / type ii distinction of anti- cd20 antibodies
427	3Q3G	Crystal structure of a-domain in complex with antibody
428	3QA3	Crystal structure of a-domain in complex with antibody
429	3QG6	Structural basis for ligand recognition and discrimination of a quorum quenching antibody
430	3QG7	Structural basis for ligand recognition and discrimination of a quorum quenching antibody
431	3QO1	Monoclinic form of igg1 fab fragment (apo form) sharing same fv as iga
432	3QUM	Crystal structure of human prostate specific antigen (psa) in fab sandwich with a high affinity and a pca selective antibody
433	3R08	Crystal structure of mouse cd3epsilon in complex with antibody 2c11 fab
434	3SE8	Crystal structure of broadly and potently neutralizing antibody vrc03 in complex with hiv-1 gp120
435	3SE9	Crystal structure of broadly and potently neutralizing antibody vrc-pg04 in complex with hiv-1 gp120
436	3SGD	Crystal structure of the mouse mab 17.2
437	3SKJ	Structural and functional characterization of an agonistic anti-human epha2 monoclonal antibody
438	3SY0	S25-2- a(2-8)-a(2-4)kdo trisaccharide complex
439	3T4Y	S25-2- kdo monosaccharide complex
440	3T65	S25-2- a(2-8)kdo disaccharide complex
441	3T77	S25-2- a(2-4)kdo disaccharide complex
442	3THM	Crystal structure of fas receptor extracellular domain in complex with fab ep6b_b01
443	3TJE	Crystal structure of fas receptor extracellular domain in complex with fab e09
444	3U1S	Crystal structure of human fab pgt145, a broadly reactive and potent hiv-1 neutralizing antibody
445	3U2S	Crystal structure of pg9 fab in complex with v1v2 region from hiv-1 strain zm109
446	3U36	Crystal structure of pg9 fab
447	3UBX	Crystal structure of the mouse cd1d-c20:2-agalcer-l363 mab fab complex
448	3UJI	Crystal structure of anti-hiv-1 v3 fab 2558 in complex with mn peptide
449	3UJJ	Crystal structure of anti-hiv-1 v3 fab 4025 in complex with con a peptide
450	3UJT	Structure of the fab fragment of ab-52, an antibody that binds the o-antigen of francisella tularensis
451	3UOI	Structure of a monoclonal antibody complexed with its mhc-i antigen
452	3UYR	Structure of a monoclonal antibody complexed with its mhc-i antigen
453	3V4P	Crystal structure of a4b7 headpiece complexed with fab act-1
454	3V4U	Structure of a monoclonal antibody complexed with its mhc-i antigen
455	3V4V	Crystal structure of a4b7 headpiece complexed with fab act-1 and ro0505376
456	3V52	Structure of a monoclonal antibody complexed with its mhc-i antigen
457	3V6F	Crystal structure of an anti-hbv e-antigen monoclonal fab fragment (e6), unbound
458	3WIH	Crystal structure of the third fibronectin domain (fn3) of human robo1 in complex with the fab fragment of murine monoclonal antibody b2212a.
459	3WN5	Crystal structure of asymmetrically engineered fc variant in complex with fcgr1ia
460	3X0E	Crystal structure of the ectodomain of human cd81 large extracellular loop (hcd81-lel)
461	3X0F	Crystal structure of the ectodomain of mouse cd81 large extracellular loop (mcd81-lel)
462	4A6Y	Crystal structure of fab fragment of anti-(4-hydroxy-3-nitrophenyl)-acetyl murine germline antibody bbe6.12h3
463	4AG4	Crystal structure of a ddr1-fab complex
464	4B50	Crystal structure of the hiv-1 gp41 mper-specific llama vhh 2h10
465	4BH7	Crystal structure of germline antibody 36-65 in complex with peptide ppypawhapgni
466	4BH8	Crystal structure of germline antibody 36-65 in complex with peptide gdprpsyishll
467	4C83	Crystal structure of the igg2a lpt3 in complex with an 8-sugar inner core analogue of neisseria meningitidis

468	4CJD	Crystal structure of neisseria meningitidis trimeric autotransporter and vaccine antigen nada
469	4DAG	Structure of the human metapneumovirus fusion protein with neutralizing antibody identifies a pneumovirus antigenic site
470	4DGV	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic region 412-423 bound to the broadly neutralizing antibody hcv1, p2(1) form
471	4DGY	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic region 412-423 bound to the broadly neutralizing antibody hcv1, c2 form
472	4E9O	Vaccinia d8l ectodomain structure
473	4EBQ	Fab structure of anti-vaccinia virus d8l antigen mouse igg2a la5
474	4EDW	Nerve growth factor in complex with fab from humanized version of mouse mab 911 (tanezumab)
475	4EDX	Nerve growth factor in complex with fab from mouse mab 911
476	4ETQ	Vaccinia virus d8l imv envelope protein in complex with fab of murine igg2a la5
477	4F33	Crystal structure of therapeutic antibody morab-009
478	4F3F	Crystal structure of msln7-64 morab-009 fab complex
479	4FFV	Crystal structure of dipeptidyl peptidase iv (dpp4, dpp-iv, cd26) in complex with 11a19 fab
480	4FFW	Crystal structure of dipeptidyl peptidase iv (dpp4, dpp-iv, cd26) in complex with fab + sitagliptin
481	4FQH	Crystal structure of fab cr9114
482	4FQI	Crystal structure of fab cr9114 in complex with a h5n1 influenza virus hemagglutinin
483	4G6A	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic region 412-423 bound to the broadly neutralizing antibody ap33
484	4G6F	Crystal structure of 10e8 fab in complex with an hiv-1 gp41 peptide
485	4GMT	Crystal structure of heterosubtypic fab s139/1
486	4GXU	Crystal structure of antibody 1f1 bound to the 1918 influenza hemagglutinin
487	4GXV	Crystal structure of anti-influenza virus antibody 1f1
488	4GXX	Crystal structure of the 'avianized' 1918 influenza virus hemagglutinin
489	4H0G	Crystal structure of mimicry-recognizing native 2d10 scfv
490	4H0H	Crystal structure of mimicry-recognizing 2d10 scfv with peptide
491	4H0I	Crystal structure of scfv-2d10 in complex with methyl alpha-d-mannopyranoside
492	4H8W	Crystal structure of non-neutralizing and adcc-potent antibody n5-i5 in complex with hiv-1 clade a/e gp120 and scd4.
493	4HF5	Crystal structure of fab 8f8 in complex a h2n2 influenza virus hemagglutinin
494	4HGK	Shark ignar variable domain
495	4HH9	Anti-human cytomegalovirus (hcmv) fab ke5
496	4HHA	Anti-human cytomegalovirus (hcmv) fab ke5 with epitope peptide ad-2s1
497	4HIE	Anti-streptococcus pneumoniae 23f fab 023.102
498	4HIH	Anti-streptococcus pneumoniae 23f fab 023.102 with bound rhamnose.
499	4HII	Anti-streptococcus pneumoniae 23f fab 023.102 with bound rhamnose-galactose
500	4HIJ	Anti-streptococcus pneumoniae 23f fab 023.102 with bound l-rhamnose-(1-2)-alpha-d-galactose-(3-o)-phosphate-2-glycerol
501	4HK0	Uca fab (unbound) from ch65-ch67 lineage
502	4HK3	I2 fab (unbound) from ch65-ch67 lineage
503	4HKB	Ch67 fab (unbound) from the ch65-67 lineage
504	4HKX	Influenza hemagglutinin in complex with ch67 fab
505	4HLZ	Crystal structure of fab c179 in complex with a h2n2 influenza virus hemagglutinin
506	4HMG	Refinement of the influenza virus hemagglutinin by simulated annealing
507	4HWB	Crystal structure of ectodomain 3 of the il-13 receptor alpha 1 in complex with a human neutralizing monoclonal antibody fragment
508	4HXA	Crystal structure of 13d9 fab
509	4HXB	Crystal structure of 6b9 fab
510	4I2X	Crystal structure of signal regulatory protein gamma (sirp-gamma) in complex with fabox117
511	4I3R	Crystal structure of the outer domain of hiv-1 gp120 in complex with vrc-pg04 space group p3221
512	4I3S	Crystal structure of the outer domain of hiv-1 gp120 in complex with vrc-pg04 space group p21
513	4JAM	Crystal structure of broadly neutralizing anti-hiv-1 antibody ch103
514	4JAN	Crystal structure of broadly neutralizing antibody ch103 in complex with hiv-1 gp120
515	4JHA	Crystal structure of rsv-neutralizing human antibody d25
516	4JHW	Crystal structure of respiratory syncytial virus fusion glycoprotein stabilized in the prefusion conformation by human antibody d25
517	4JO1	Crystal structure of rabbit mab r56 fab in complex with v3 crown of hiv-1 jr-fl gp120
518	4JO2	Crystal structure of rabbit mab r56 fab in complex with v3 crown of hiv-1 consensus a gp120
519	4JO3	Crystal structure of rabbit mab r20 fab in complex with v3 c-terminus of hiv-1 consensus b gp120
520	4JO4	Crystal structure of rabbit mab r20 fab
521	4K24	Structure of anti-upar fab atn-658 in complex with upar
522	4K2U	Crystal structure of pfeba-175 f1 in complex with r218 antibody fab fragment
523	4K15	Cystal structure of human factor viii c2 domain in a ternary complex with murine inhibitory antibodies 3e6 and g99
524	4KJY	Complex of high-affinity sirp alpha variant fd6 with cd47
525	4KPH	Structure of the fab fragment of n62, a protective monoclonal antibody to the nonreducing end of francisella tularensis o-antigen
526	4KRL	Nanobody/vhh domain 7d12 in complex with domain iii of the extracellular region of egfr, ph 6.0
527	4KRM	Nanobody/vhh domain 7d12 in complex with domain iii of the extracellular region of egfr, ph 3.5
528	4KRO	Nanobody/vhh domain ega1 in complex with the extracellular region of egfr
529	4KRP	Nanobody/vhh domain 9g8 in complex with the extracellular region of egfr

530	4KV5	Scfv gc1009 in complex with tgf-beta1.
531	4KXZ	Crystal structure of tgfb2 in complex with gc2008.
532	4LQF	Structure of murine igg2b a2c7-fab in complex with vaccinia antigen a33r at the resolution of 2.3 angstroms
533	4LSS	Crystal structure of broadly and potently neutralizing antibody vrc01 in complex with hiv-1 clade a strain ker_2018_11 gp120
534	4LST	Crystal structure of broadly and potently neutralizing antibody vrc01 in complex with hiv-1 clade c strain zm176.66 gp120
535	4LU5	Structure of murine igg2a a20g2-fab in complex with vaccinia antigen a33r at the resolution of 2.9 angstroms
536	4M1D	Crystal structure of anti-hiv-1 fab 447-52d in complex with v3 cyclic peptide mn
537	4M1G	Structure of murine igg2a a27d7-fab in complex with vaccinia antigen a33r at the resolution of 1.6 angstroms
538	4M3J	Structure of a single-domain camelid antibody fragment cab-h7s specific of the blap beta-lactamase from bacillus licheniformis
539	4M3K	Structure of a single domain camelid antibody fragment cab-h7s in complex with the blap beta-lactamase from bacillus licheniformis
540	4M5Y	Crystal structure of broadly neutralizing fab 5j8
541	4M7J	Crystal structure of s25-26 in complex with kdo(2.8)kdo(2.4)kdo trisaccharide
542	4M7Z	Unliganded 1 crystal structure of s25-26 fab
543	4M93	Unliganded 2 crystal structure of s25-26 fab
544	4MA1	Unliganded 3 crystal structure of s25-26 fab
545	4N0Y	Structure of the hepatitis c envelope glycoprotein e1 antigenic region 314-324 bound to the cross-neutralizing antibody igh526
546	4N1H	Structure of a single-domain camelid antibody fragment cab-f11n in complex with the blap beta-lactamase from bacillus licheniformis
547	4NBX	Crystal structure of clostridium difficile toxin a fragment tcda-a1 bound to a20.1 vhh
548	4NBY	Crystal structure of tcda-a2 bound to two molecules of a20.1 vhh
549	4NBZ	Crystal structure of tcda-a1 bound to a26.8 vhh
550	4NC0	Crystal structure of tcda-a2 bound to a26.8 vhh
551	4NC1	Crystal structure of tcda-a2 bound to a20.1 vhh and a26.8 vhh
552	4NC2	Crystal structure of tcdb-b1 bound to b39 vhh
553	4NGH	Crystal structure of the hiv-1 neutralizing antibody 4e10 fab fragment in complex with a hydrocarbon-stapled peptide containing the 4e10 epitope on gp41 and a tethered phosphate moiety.
554	4NHC	Crystal structure of the hiv-1 neutralizing antibody 4e10 fab fragment in complex with a hydrocarbon-stapled peptide containing the 4e10 epitope on gp41.
555	4NIK	Structure of human gankyrin in complex to the single chain antibody f5
556	4NZR	Crystal structure of the antibody-binding region of protein m (protein m td) in complex with anti-hiv antibody pgt135 fab
557	4NZT	Crystal structure of the antibody-binding region of protein m (protein m td) in complex with anti-influenza hemagglutinin antibody cr9114 fab
558	4NZU	Crystal structure of the primary monoclonal antibody 13pl fab' from a multiple myeloma patient
559	4O5L	Crystal structure of broadly neutralizing antibody f045-092
560	4OLU	Crystal structure of antibody vrc07 in complex with clade a/e 93th057 hiv-1 gp120 core
561	4OLV	Crystal structure of antibody vrc07-g54f in complex with clade a/e 93th057 hiv-1 gp120 core
562	4OLW	Crystal structure of antibody vrc07-g54h in complex with clade a/e 93th057 hiv-1 gp120 core
563	4OLX	Crystal structure of antibody vrc07-g54l in complex with clade a/e 93th057 hiv-1 gp120 core
564	4OLY	Crystal structure of antibody vrc07-g54r in complex with clade a/e 93th057 hiv-1 gp120 core
565	4OLZ	Crystal structure of antibody vrc07-g54w in complex with clade a/e 93th057 hiv-1 gp120 core
566	4OM0	Crystal structure of antibody vrc07-g54y in complex with clade a/e 93th057 hiv-1 gp120 core
567	4OM1	Crystal structure of antibody vrc07-i30q, g54w, s58n in complex with clade a/e 93th057 hiv-1 gp120 core
568	4OT1	Structural basis for the recognition of human cytomegalovirus glycoprotein b by the neutralizing human antibody sm5-1
569	4OTX	Structure of the anti-francisella tularensis o-antigen antibody n203 fab fragment
570	4P49	The structure of a chicken anti-prostate specific antigen scfv
571	4P9H	Crystal structure of 8anc195 fab in complex with gp120 of 93th057 hiv-1 and soluble cd4 d1d2
572	4PTT	Crystal structure of anti-23f strep fab c05
573	4PTU	Crystal structure of anti-23f strep fab c05 with rhamnose
574	4Q6I	Crystal structure of murine 2d5 fab, a potent anti-cd4 hiv-1-neutralizing antibody in complex with cd4
575	4Q97	Ignar antibody domain c1
576	4Q9B	Ignar antibody domain c2
577	4Q9C	Ignar antibody domain c3
578	4QEX	Crystal structure of pfeba-175 rii in complex with a fab fragment from inhibitory antibody r217
579	4QHU	Crystal structure of il-17a/fab6785 complex
580	4QTI	Crystal structure of human upar in complex with anti-upar fab 8b12
581	4QXG	Antigen binding fragment of an anti ifnar1 antibody
582	4R2G	Crystal structure of pgt124 fab bound to hiv-1 jrcsf gp120 core and to cd4
583	4R4H	Crystal structure of non-neutralizing, a32-like antibody 2.2c in complex with hiv-1 env gp120
584	4R7D	Fab hu 15c1
585	4R7N	Fab c2e3
586	4R9Y	Crystal structure of kkofab in complex with platelet factor 4
587	4RAU	Crystal structure of rtotfab in complex with human pf4
588	4RRP	Crystal structure of the fab complexed with antigen asf1p, northeast structural genomics consortium (nesg) target pdr16

589	4TRP	Crystal structure of monoclonal antibody against neuroblastoma associated antigen.
590	4TUJ	Crystal structure of monoclonal antibody against neuroblastoma associated antigen.
591	4TUK	Crystal structure of monoclonal antibody against neuroblastoma associated antigen.
592	4TUL	Crystal structure of monoclonal antibody against neuroblastoma associated antigen.
593	4TUO	Crystal structure of monoclonal antibody against neuroblastoma associated antigen.
594	4U0Q	Plasmodium falciparum reticulocyte-binding protein homologue 5 (pfrh5) bound to basigin
595	4U3X	Structure of a human vh antibody domain binding to the cleft of hen egg lysozyme
596	4U6G	Crystal structure of 10e8 fab in complex with a hydrocarbon-stapled hiv-1 gp41 mper peptide
597	4U6V	Mechanisms of neutralization of a human anti-alpha toxin antibody
598	4UAO	Crystal structure of apical membrane antigen 1 from plasmodium knowlesi in complex with an invasion inhibitory antibody
599	4UIF	Cryo-em structure of dengue virus serotype 2 in complex with antigen-binding fragments of human antibody 2d22
600	4UIH	Cryo-em structure of dengue virus serotype 2 strain new guinea-c complexed with human antibody 2d22 fab at 37 degree c. the fab molecules were added to the virus before 37 degree c incubation.
601	4UV6	Crystal structure of apical membrane antigen 1 from plasmodium knowlesi
602	4WEU	Co-complex structure of the f4 fimbrial adhesin faeg variant ad with llama single domain antibody v3
603	4WHT	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic region 412-423 bound to the broadly neutralizing antibody 3/11, p1 crystal form
604	4WHY	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic region 412-423 bound to the broadly neutralizing antibody 3/11, p21 crystal form
605	4WUU	Structure of esk1 in complex with hla-a*0201/wt1
606	4XVJ	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic 2 region 412-423 bound to the broadly neutralizing antibody hc33.1
607	4YHP	Crystal structure of 309m3-b fab in complex with h3k9me3 peptide
608	4YHY	Crystal structure of 309m3-b in complex with trimethylated lys
609	4YHZ	Crystal structure of 304m3-b fab in complex with h3k4me3 peptide
610	4YNY	Crystal structure of monoclonal anti-human podoplanin antibody nz-1
611	4Y0O	Crystal structure of monoclonal anti-human podoplanin antibody nz-1 with bound pa peptide
612	4Z0X	Structure of hepatitis c virus envelope glycoprotein e2 antigenic region 434-446 bound to the broadly neutralizing antibody hc26am
613	4ZD3	Structure of a transglutaminase 2-specific autoantibody fab fragment
614	4ZFF	Dual-acting fab 5a12 in complex with vegf
615	4ZFG	Dual-specificity fab 5a12 in complex with angiopoietin 2
616	4ZFO	J22.9-xi: chimeric mouse/human antibody against human bcma (cd269)
617	4ZH7	Structural basis of lewisb antigen binding by the helicobacter pylori adhesin baba
618	5A1Z	Cryo-em structure of dengue virus serotype 2 strain pvp94-07 complexed with human antibody 2d22 fab at 37 degrees c
619	5A2I	Crystal structure of scfv-sm3 in complex with apd-sgalnac-rp
620	5A2J	Crystal structure of scfv-sm3 in complex with the naked peptide apdtrp
621	5A2K	Crystal structure of scfv-sm3 in complex with apd-tgalnac-rp
622	5A2L	Crystal structure of scfv-sm3 in complex with apd-cgalnac-rp
623	5A7X	Negative stain em of bg505 sosip.664 in complex with scd4, 17b, and 8anc195
624	5A8H	Cryo-et subtomogram averaging of bg505 sosip.664 in complex with scd4, 17b, and 8anc195
625	5AZE	Fab fragment of calcium-dependent antigen binding antibody, 6rl#9
626	5BW7	Crystal structure of nonfucosylated fc y296w mutant complexed with bis-glycosylated soluble form of fc gamma receptor iiia
627	5CMA	Anti-b7-h3 monoclonal antibody ch8h9 fab fragment
628	5CP3	Crystal structure of an antigen-binding fragment of monoclonal antibody against sulfonamides in complex with sulfathiazole
629	5CP7	Crystal structure of an antigen-binding fragment of monoclonal antibody against sulfonamides
630	5DFV	Crystal structure of human cd81 large extracellular loop in complex with murine fab fragment k04
631	5DFW	Crystal structure of human cd81 large extracellular loop in complex with single chain fv fragment k13
632	5DMI	Structure of the extracellular domain of the cd40 in complex with chi220 fab
633	5DMJ	Structure of the extracellular domain of the cd40 in complex with 3h56-5 dab
634	5DWU	Beta common receptor in complex with a fab
635	5ERW	Structure of hcv e2 glycoprotein antigenic epitope ii bound to the broadly neutralizing antibody hc84-26
636	5EZI	Crystal structure of fab of parasite invasion inhibitory antibody c1 - hexagonal form
637	5EZJ	Crystal structure of fab of parasite invasion inhibitory antibody c1 - orthorhombic form
638	5EZL	Crystal structure of fab of parasite invasion inhibitory antibody c1 - monoclinic form
639	5EZN	Crystal structure of pfcyrpa
640	5EZO	Crystal structure of pfcyrpa in complex with an invasion-inhibitory antibody fab.
641	5GGV	Ctla-4 in complex with tremelimumab fab
642	5GKR	Crystal structure of sle patient-derived anti-dna antibody in complex with oligonucleotide
643	5GKS	Crystal structure of sle patient-derived anti-dna antibody
644	5HDQ	Mntc co-structure with mab 305-78-7
645	5HMG	Refinement of the influenza virus hemagglutinin by simulated annealing
646	5I4F	Scfv 2d10 complexed with alpha 1,6 mannobiose
647	5I76	Crystal structure of fm318, a recombinant fab adopted from cetuximab
648	5IHL	Structure of the extracellular domain of the cd40 in complex with 3h56-5 dab
649	5ITB	Crystal structure of the anti-rsv f fab 14n4

650	5J3D	Crystal structure of human fab 14n4 in complex with post-fusion rsv f
651	5JO5	Crystal structure of 10e8 ghv-glv antigen-binding fragment.
652	5JOF	Crystal structure of vrc03 ghv-glv antigen-binding fragment.
653	5JR1	Crystal structure of 10e8 ghv-maturel antigen-binding fragment.
654	5JUE	Crystal structure of uic2 fab
655	5JXA	Crystal structure of ligand-free vrc03 antigen-binding fragment.
656	5KZP	Structure of the hcv1-c1 antibody-antigen complex
657	5LDN	A viral capsid:antibody complex
658	5M2C	Structural tuning of cd81lel (space group p32 1 2)
659	5M33	Structural tuning of cd81lel (space group p21)
660	5M3D	Structural tuning of cd81lel (space group p31)
661	5M3T	Structural tuning of cd81lel (space group p64)
662	5M4R	Structural tuning of cd81lel (space group c2)
663	5MO9	Structure of human trkb receptor ligand binding domain in complex with the fab frgment of antibody ab20
664	5N2B	The crystal structure of burkholderia pseudomallei antigen and type i fimbria protein bpsl1626.
665	5N4J	Human fab fragment 10c3 against nhba from neisseria meningitidis
666	5N7B	Understanding the singular conformational landscape of the tn antigens: sulfur-for- oxygen substitution in the glycosidic linkage provides new insights into molecular recognition by an antibody
667	5N7W	Computationally designed functional antibody
668	5N88	Crystal structure of antibody bound to viral protein
669	5NPH	Structure of the hepatitis c virus strain j4 glycoprotein e2 antigenic region 532-540 bound to the fab fragment of the non-neutralizing antibody dao5
670	5NPI	Structure of the hepatitis c virus strain j4 glycoprotein e2 antigenic region 532-540 bound to the single chain variable fragment of the non-neutralizing antibody dao5
671	5NPJ	Structure of the hepatitis c virus strain jfh1 glycoprotein e2 antigenic region 532-540 bound to the single chain variable fragment of the non-neutralizing antibody dao5
672	5NST	Human monoclonal antibody with a lair1 insertion
673	5NUZ	Junin virus gp1 glycoprotein in complex with an antibody fab fragment
674	5O14	Co-crystal structure of a cross-reactive bactericidal human antibody targeting meningococcal vaccine antigen factor h binding protein
675	5O1R	Human fab 5h2 bound to nhba-c3 from neisseria meningitidis serogroup b
677	5OPY	Crystal structure of anti-alphavbeta3 integrin fab lm609
678	5OWP	Crystal structure of glycopeptide 'gvtsafpdtrpap' in complex with scfv-sm3
679	5SV3	Rta1-33/44-198 (rvec) bound to single domain antibody a3c8
680	5SV4	Anti-ricin a-chain single domain antibody a3c8
681	5T6P	Crystal structure of therapeutic mab ar20.5 in complex with muc1 peptide
682	5T78	Crystal structure of therapeutic mab ar20.5 in complex with muc1 peptide
683	5TCX	Crystal structure of human tetraspanin cd81
684	5TIH	Structural basis for inhibition of erythrocyte invasion by antibodies to plasmodium falciparum protein cyrpa
685	5TIK	Structural basis for inhibition of erythrocyte invasion by antibodies to plasmodium falciparum protein cyrpa
686	5TL5	Complex between human cd27 and antibody m2177
687	5TLJ	Complex between human cd27 and fab fragments of antibodies m2177 and m2191
688	5TLK	Complex between human cd27 and fab fragments of antibodies m2177 and h2191
689	5TRU	Structure of the first-in-class checkpoint inhibitor ipilimumab bound to human ctla-4
690	5TZ2	Crystal structure of human cd47 ecd bound to fab of c47b222
691	5TZZ	Crystal structure of human cd47 ecd bound to fab of c47b161
692	5TZU	Crystal structure of human cd47 ecd bound to fab of b6h12.2
693	5U1F	Initial contact of hiv-1 env with cd4: cryo-em structure of bg505 ds-sosip trimer in complex with cd4 and antibody pgt145
694	5U3J	Crystal structure of dh511.1 fab in complex with hiv-1 gp41 mper peptide
695	5U3N	Crystal structure of dh511.12p fab in complex with hiv-1 gp41 mper peptide
696	5UCB	Structure of antigen-fab complex with engineered switch residue region.
697	5UEA	Structure of antigen-fab complex with histone chaperone asf1
698	5UEK	Structure of antigen-fab 12e complex with histone chaperone asf1
699	5UG0	Human antibody h2897 in complex with influenza hemagglutinin h1 solomon islands/03/2006
700	5UJZ	Cryoem structure of an influenza virus receptor-binding site antibody-antigen interface - class 1
701	5UK0	Cryoem structure of an influenza virus receptor-binding site antibody-antigen interface - class 2
702	5UK1	Cryoem structure of an influenza virus receptor-binding site antibody-antigen interface - class 3
703	5UK2	Cryoem structure of an influenza virus receptor-binding site antibody-antigen interface - class 4
704	5UR8	Human antibody fragment (fab) to meningococcal factor h binding protein
705	5VF2	Scfv 2d10 re-refined as a complex with trehalose replacing the original alpha-1,6-mannobiose
706	5VL3	Cd22 d1-d3 in complex with therapeutic fab epratuzumab
707	5VN8	Cryo-em model of b41 sosip.664 in complex with fragment antigen binding variable domain of b12
708	5VXJ	2.50 a resolution structure of ipad from shigella flexneri in complex with single-domain antibody jmk-e3
709	5VXK	2.55 a resolution structure of ipad from shigella flexneri in complex with single-domain antibody jmk-h2
710	5VXL	2.80 a resolution structure of ipad from shigella flexneri in complex with single-domain antibody jps-g3
711	5VXM	2.05 a resolution structure of ipad from shigella flexneri in complex with single-domain antibody 20ipad
712	5VXR	The antigen-binding fragment of mab24 in complex with a peptide from hepatitis c virus e2 epitope i (412-423)
713	5VZR	Crystal structure of mers-cov neutralizing antibody g4 fab
714	5W2B	Crystal structure of c-terminal domain of ebola (reston) nucleoprotein in complex with fab fragment
715	5W9H	Mers s ectodomain trimer in complex with variable domain of neutralizing antibody g4

716	5W9I	Mers s ectodomain trimer in complex with variable domain of neutralizing antibody g4
717	5W9J	Mers s ectodomain trimer in complex with variable domain of neutralizing antibody g4
718	5W9K	Mers s ectodomain trimer in complex with variable domain of neutralizing antibody g4
719	5W9L	Mers s ectodomain trimer in complex with variable domain of neutralizing antibody g4
720	5W9M	Mers s ectodomain trimer in complex with variable domain of neutralizing antibody g4
721	5W9N	Mers s ectodomain trimer in complex with variable domain of neutralizing antibody g4
722	5W9O	Mers s ectodomain trimer in complex with variable domain of neutralizing antibody g4
723	5W9P	Mers s ectodomain trimer in complex with variable domain of neutralizing antibody g4
724	5WK4	Crystal structure of an anti-idiotypic vlr
725	5WKQ	2.10 a resolution structure of ipab (residues 74-242) from shigella flexneri
726	5WN9	Structure of antibody 2d10 bound to the central conserved region of rsv g
727	5WNA	Structure of antibody 3d3 bound to the central conserved region of rsv g
728	5WNB	Structure of antibody 3d3 bound to the linear epitope of rsv g
729	5XBM	Structure of scarb2-jl2 complex
730	5XCQ	Crystal structure of p20.1 fv-clasp fragment with its antigen peptide
731	5XCR	Crystal structure of p20.1 fv-clasp fragment with its antigen peptide
732	5XCS	Crystal structure of 12ca5 fv-clasp fragment with its antigen peptide
733	5XCT	Crystal structure of p20.1 fv-clasp fragment with its antigen peptide
734	5XCU	Crystal structure of 12ca5 fv-clasp fragment with its antigen peptide
735	5XCV	Crystal structure of nz-1 fv-clasp fragment with its antigen peptide
736	5XJ3	Complex structure of ipilimumab-scfv and ctla-4
737	5XRT	Crystal structure of a/minnesota/11/2010 (h3n2) influenza virus hemagglutinin
738	5XWD	Crystal structure of the complex of 059-152-fv and egfr-ecd
739	5YC5	Crystal structure of human igg-fc in complex with aglycan and optimized fc gamma receptor iiii
740	5ZV3	Crystal structure of human anti-tau antibody cbtau-28.1 in complex with its tau peptide
741	6A3V	Complex structure of human 4-1bb and 4-1bbl
742	6A3W	Complex structure of 4-1bb and utomilumab
743	6A76	Crystal structure of the fab fragment of b5209b, a murine monoclonal antibody specific for the fifth immunoglobulin domain (ig5) of human robo1
744	6A77	Crystal structure of the fifth immunoglobulin domain (ig5) of human robo1 in complex with the fab fragment of murine monoclonal antibody b5209b
745	6A78	Crystal structure of the fifth immunoglobulin domain (ig5) of human robo1 in complex with the scfv fragment of murine monoclonal antibody b5209b
746	6A79	Crystal structure of the fifth immunoglobulin domain (ig5) of human robo1 in complex with the mutant scfv fragment (p103a) of murine monoclonal antibody b5209b
747	6AL5	Complex between cd19 (n138q mutant) and b43 fab
748	6ANA	LI2 fab in complex with anti-kappa vhh domain
749	6AND	Pinatuzumab fab in complex with anti-kappa vhh domain
750	6ANI	Coltuximab fab in complex with anti-kappa vhh domain
751	6AQ7	Structure of pom6 fab fragment complexed with mouse prpc
752	6ATT	39s fab bound to her2 ecd
753	6AZZ	Crystal structure of pfs25 in complex with the transmission blocking antibody 1190
754	6B08	Crystal structure of pfs25 in complex with the transmission blocking antibody 1276
755	6B0A	Crystal structure of pfs25 in complex with the transmission blocking antibody 1269
756	6B0E	Crystal structure of pfs25 in complex with the transmission blocking antibody 1260
757	6B0G	Crystal structure of pfs25 in complex with the transmission blocking antibody 1245
758	6B0H	Crystal structure of pfs25 in complex with the transmission blocking antibody 1262
759	6BE2	Crystal structure of a polysaccharide-binding human fab (f598)
760	6BE3	Crystal structure of a polysaccharide-binding human fab (f598) in complex with n-acetyl-d-glucosamine (glcnac)
761	6BE4	Crystal structure of a polysaccharide-binding human fab (f598) in complex with nona-n-acetyl-d-glucosamine (9nac)
762	6BIT	Sirpalpa antibody complex
763	6BRB	Novel non-antibody protein scaffold targeting cd40l
764	6BXA	Crystal structure of n-terminal fragment of zebrafish toll-like receptor 5 (tlr5) with lamprey variable lymphocyte receptor 2 (vlr2) bound
765	6BXC	Crystal structure of n-terminal fragment of zebrafish toll-like receptor 5 (tlr5) with lamprey variable lymphocyte receptor 9 (vlr9) bound
766	6BXD	Crystal structure of variable lymphocyte receptor 2 (vlr2)
767	6BXE	Crystal structure of variable lymphocyte receptor 9 (vlr9)
768	6BZU	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic region 412-423 bound to the broadly neutralizing antibody 19b3
769	6BZV	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic region 412-423 bound to the gl precursor of the broadly neutralizing antibody 19b3
770	6BZW	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic region 412-423 bound to the gl precursor of the broadly neutralizing antibody ap33
771	6BZY	Structure of the hepatitis c virus envelope glycoprotein e2 antigenic region 412-423 bound to the 22d11 broadly neutralizing antibody
772	6C5H	S25-5 fab in complex with chlamydiae-specific lps antigen
773	6C5I	Unliganded s25-5 fab
774	6C5J	S25-23 fab in complex with chlamydiae lps (crystal form 1)

775	6C5K	S25-23 fab in complex with chlamydiaceae lps (crystal form 2)
776	6C6X	Crystal structure of middle-east respiratory syndrome (mers) coronavirus neutralizing antibody jc57-14 isolated from a vaccinated rhesus macaque.
777	6C6Y	Crystal structure of middle-east respiratory syndrome (mers) coronavirus neutralizing antibody jc57-14 isolated from a vaccinated rhesus macaque in complex with mers receptor binding domain
778	6C6Z	Crystal structure of potent neutralizing antibody cdc2-c2 in complex with mers-cov s1 rbd
779	6CUJ	Crystal structure of the c-terminal domain of neisserial heparin binding antigen (nhba)
780	6DC3	Rsv prefusion f bound to rsd5 fab
781	6DC4	Rsv-neutralizing human antibody am22
782	6DC5	Rsv prefusion f in complex with am22 fab
783	6DCV	Crystal structure of human anti-tau antibody cbtau-27.1
784	6DCW	Crystal structure of human anti-tau antibody cbtau-27.1 fab in complex with a human tau peptide
785	6DDM	Crystal structure analysis of the epitope of an anti-mica antibody
786	6DDR	Crystal structure analysis of the epitope of an anti-mica antibody
787	6DDV	Crystal structure analysis of the epitope of an anti-mica antibody
788	6DFG	Bg505 md39 sosip trimer in complex with mature bg18 fragment antigen binding
789	6DFH	Bg505 md64 n332-gt2 sosip trimer in complex with germline-reverted bg18 fragment antigen binding
790	6DG2	Antigen binding fragment of the pan-ebolavirus monoclonal antibody 6d6
791	6E62	Crystal structure of malaria transmission-blocking antigen pfs48/45 6c in complex with antibody 85rf45.1
792	6E63	Crystal structure of malaria transmission-blocking antigen pfs48/45 6c in complex with antibody tb31f
793	6E64	Crystal structure of malaria transmission-blocking antibody 85rf45.1
794	6E65	Crystal structure of malaria transmission-blocking antibody tb31f
795	6E8V	The crystal structure of bovine ultralong antibody bov-1
796	6E9G	The crystal structure of bovine ultralong antibody bov-2
797	6E9H	The crystal structure of bovine ultralong antibody bov-3
798	6E9I	The crystal structure of bovine ultralong antibody bov-4
799	6E9K	The crystal structure of bovine ultralong antibody bov-5
800	6E9Q	The crystal structure of bovine ultralong antibody bov-6
801	6E9U	The crystal structure of bovine ultralong antibody bov-7
802	6EDU	B41 sosip.664 in complex with soluble cd4 (d1-d2), the co-receptor mimicking antibody 21c and the broadly neutralizing antibody 8anc195
803	6EJG	Crystal structure of human cd81 large extracellular loop in complex with single chain fv fragment 4
804	6EJM	Crystal structure of human cd81 large extracellular loop in complex with single chain fv fragment 5
805	6EK2	Crystal structure of human cd81 large extracellular loop in complex with single chain fv fragment 10
806	6EUN	Crystal structure of neisseria meningitidis vaccine antigen nada variant 3
807	6EUP	Crystal structure of neisseria meningitidis nada variant 3 double mutant a33i-i38l
808	6EV1	Crystal structure of antibody against schizophyllan
809	6EV2	Crystal structure of antibody against schizophyllan in complex with laminarihexaose
810	6EWB	Crystal structure of gii.4 unsw 2012 p domain in complex with fab 10e9
811	6FAB	Three-dimensional structure of murine anti-p-azophenylarsenate fab 36-71. 1. x-ray crystallography, site-directed mutagenesis, and modeling of the complex with hapten
812	6FAX	Complex of human cd40 ectodomain with lob 7.4 fab
813	6FN1	Zosuquidar and uic2 fab complex of human-mouse chimeric abcb1 (abcb1hm)
814	6FN4	Apo form of uic2 fab complex of human-mouse chimeric abcb1 (abcb1hm)
815	6FRJ	Crystal structure of scfv-sm3 in complex with apd-sethgalnac-rp
816	6GK7	Crystal structure of anti-tau antibody dmcbbtau-27.1, double mutant (s31y, t100i) of cbtau-27.1, in complex with tau peptide a8119b (residues 299-318)
817	6GK8	Crystal structure of anti-tau antibody dmcbbtau-28.1, double mutant (s32r, e35k) of cbtau-28.1, in complex with tau peptide a7731 (residues 52-71)
818	6H2Y	Human fab 1e6 bound to fhbp variant 3 from neisseria meningitidis serogroup b
819	6I3Z	Fab fragment of an antibody selective for wild-type alpha-1-antitrypsin in complex with its antigen
820	6I9J	Human transforming growth factor beta2 in a tetragonal crystal form
821	6IAP	Structure of human nkp46 in complex with antibody nkp46-1 and nkp46-4
822	6JMQ	Lat1-cd98hc complex bound to mem-108 fab
823	6JMR	Cd98hc extracellular domain bound to hbj127 fab and mem-108 fab
824	6K4Z	Single-chain fv antibody of c6 complexed with 2-(4-hydroxy-3-nitrophenyl)acetic acid
825	6K7O	Complex structure of lilrb4 and h128-3 antibody
826	6KN9	Crystal structure of human interleukin 18 receptor beta extracellular domain in complex with an antagonistic scfv
827	6MH2	Structure of herceptin fab without antigen
828	6MHR	Structure of the human 4-1bb / urelumab fab complex
829	6MI2	Structure of the human 4-1bb / utomilumab fab complex
830	6MN7	Cryo-em structure of bg505.sosip.664 in complex with bf520.1 antigen binding fragment
831	6MPG	Cryo-em structure at 3.2 a resolution of hiv-1 fusion peptide-directed antibody, a12v163-b.01, elicited by vaccination of rhesus macaques, in complex with stabilized hiv-1 env bg505 ds-sosip, which was also bound to antibodies vrc03 and pgt122
832	6MPH	Cryo-em structure at 3.8 a resolution of hiv-1 fusion peptide-directed antibody, df1w-a.01, elicited by vaccination of rhesus macaques, in complex with stabilized hiv-1 env bg505 ds-sosip, which was also bound to antibodies vrc03 and pgt122
833	6MQC	Vaccine-elicited nhp fp-targeting neutralizing antibody 0pv-c.01 in complex with fp (residue 512-519)

834	6MQE	Vaccine-elicited nhp fp-targeting hiv neutralizing antibody dfph-a.15 in complex with hiv fusion peptide (residue 512-519)
835	6MQM	Vaccine-elicited nhp fp-targeting neutralizing antibody df1w-a.01 in complex with hiv fusion peptide (residue 512-519)
836	6MQR	Vaccine-elicited nhp fp-targeting neutralizing antibody 0pv-a.01 in complex with fp (residue 512-519)
837	6MQS	Vaccine-elicited nhp fp-targeting hiv neutralizing antibody a12v163-a.01 in complex with hiv fusion peptide (residue 512-519)
838	6N16	Vaccine-elicited nhp fp-targeting neutralizing antibody 0pv-b.01 in complex with hiv fusion peptide (residue 512-519)
839	6N1V	Cryo-em structure at 4.0 a resolution of vaccine-elicited antibody a12v163-a.01 in complex with hiv-1 env bg505 ds-sosip, and antibodies vrc03 and pg122
840	6N1W	Cryo-em structure at 4.2 a resolution of vaccine-elicited antibody dfph-a.15 in complex with hiv-1 env bg505 ds-sosip, and antibodies vrc03 and pg122
841	6N5B	Broadly protective antibodies directed to a subdominant influenza hemagglutinin epitope
842	6N5D	Broadly protective antibodies directed to a subdominant influenza hemagglutinin epitope
843	6N5E	Broadly protective antibodies directed to a subdominant influenza hemagglutinin epitope
844	6N6B	The complex crystal structure of neuraminidase from a/minnesota/11/2010 with b10 antibody.
845	6NB5	Crystal structure of anti- mers-cov human neutralizing lca60 antibody fab fragment
846	6NB8	Crystal structure of anti- sars-cov human neutralizing s230 antibody fab fragment
847	6NC2	Amc011 v4.2 sosip env trimer in complex with fusion peptide targeting antibody acs202 fragment antigen binding
848	6NC3	Amc011 v4.2 sosip env trimer in complex with fusion peptide targeting antibody vrc34 fragment antigen binding
849	6NEX	Fab fragment of anti-cocaine antibody h2e2
850	6NF2	Cryo-em structure of vaccine-elicited antibody 0pv-c.01 in complex with hiv-1 env bg505 ds-sosip and antibodies vrc03 and pg122
851	6NF5	Bg505 md64 n332-gt5 sosip trimer in complex with bg18-like precursor hmp1 fragmentantigen binding and base-binding rm20a3 fragment antigen binding
852	6NFC	Bg505 md64 n332-gt5 sosip trimer in complex with bg18-like precursor hmp42 fragmentantigen binding and base-binding rm20a3 fragment antigen binding
853	6NMR	Blocking fab 119 anti-sirp-alpha antibody in complex with sirp-alpha variant 1
854	6NMS	Blocking fab 136 anti-sirp-alpha antibody in complex with sirp-alpha variant 1
855	6NMT	Non-blocking fab 3 anti-sirp-alpha antibody in complex with sirp-alpha variant 1
856	6NMU	Kick-off fab 115 anti-sirp-alpha antibody in complex with sirp-alpha variant 1
857	6NMV	Non-blocking fab 218 anti-sirp-alpha antibody in complex with sirp-alpha variant 1
858	6O9B	Crystal structure of hla-a3*01 in complex with a wild-type beta-catenin peptide
859	6O9C	Crystal structure of hla-a3*01 in complex with a mutant beta-catenin peptide
860	6OGX	Ternary complex of ox40r (tnfrsf4) bound to fab1 and fab2
861	6OKM	Human ox40r (tnfrsf4) bound to fab 3c8
862	6OKN	Ox40r (tnfrsf4) bound to fab 1a7
863	6OOR	Structure of 1b1 bound to mouse cd1d
864	6OSY	Cryo-em structure of vaccine-elicited antibody 0pv-a.01 in complex with hiv-1 env bg505 ds-sosip and antibodies vrc03 and pg122
865	6OT1	Cryo-em structure of vaccine-elicited antibody 0pv-b.01 in complex with hiv-1 env bg505 ds-sosip and antibodies vrc03 and pg122
866	6P62	Hiv env bg505 nfl td+ in complex with antibody e70 fragment antigen binding
867	6P65	Hiv env 16055 nfl td 2cc+ in complex with antibody 1c2 fragment antigen binding
868	6PE8	Crystal structure of cd40/abbv-323 fab complex
869	6PE9	Crystal structure of cd40 complexed to fab516
870	6PHB	Pfs25 in complex with the human transmission blocking antibody 2530
871	6PHC	Pfs25 in complex with the human transmission blocking antibody 2544
872	6PHD	Pfs25 in complex with the human transmission blocking antibody 2586
873	6PHF	Pfs25 in complex with the human transmission blocking antibody 2587
874	6PHG	Predicted germline variant of human transmission blocking antibody 2544
875	6PHH	Unliganded human transmission blocking antibody 2544
876	6PI7	Crystal structure of the tdrd2 extended tudor domain in complex with an antibody fragment and the piwil1 peptide
877	6PYC	Structure of kappa-on-heavy (koh) antibody fab bound to the cardiac hormone marinobufagenin
878	6PYD	Structure of 3e9 antibody fab bound to marinobufagenin
879	6PZW	Cryoem derived model of na-22 fab in complex with n9 shanghai2
880	6RPS	X-ray crystal structure of carbonic anhydrase xii complexed with a theranostic monoclonal antibody fragment
881	6S3T	P46, an immunodominant surface protein from mycoplasma hyopneumoniae
882	6U02	Cryoem-derived model of na-63 fab in complex with n9 shanghai2
883	6U1T	Crystal structure of anti-nipah virus (niv) f 5b3 antibody fab fragment
884	6U59	Hiv-1 b41 sosip.664 in complex with rabbit antibody 13b
885	6UG7	Complex of ch28/11 fab and ssea-4 (tetragonal form)
886	6UG8	Complex of ch28/11 fab and ssea-4 (monoclinic form)
887	6UG9	Complex of ch28/11 fab and ssea-4 (hexagonal form)
888	6UGA	Ch28/11 fab (monoclinic form)

Table 1. Experimentally determined antigen-antibody complex structures inside Protein Data Bank (PDB [\[1\]](#)) as of February 29, 2020. All the structures were retrieved from the PDB [\[1\]](#) website with a text search **antigen antibody**.

1. Berman, H.; Henrick, K.; Nakamura, H. Announcing the worldwide Protein Data Bank. *Nature Structural & Molecular Biology* **2003**, *10*, 980–980.