

Functional expression and characterization of the recombinant *N*-acetylglucosamine/*N*-acetylgalactosamine-specific marine algal lectin BPL3

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Supplementary Figure S1.

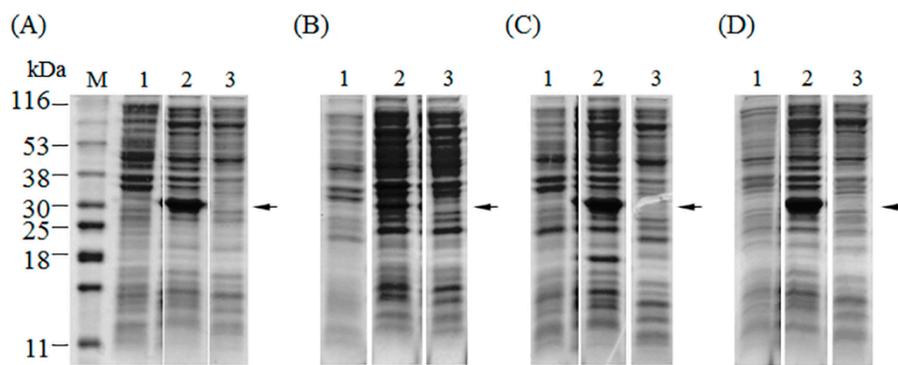


Figure S1. Expression efficiency of rD2BPL3 for various expression hosts. (A) BL21(DE3), (B) BL21(DE3)pLysS, (C) BL21-CodonPlus(DE3)-RIL, (D) Rosetta(DE3). M, Molecular weight marker; Lane 1, un-induced lysate; Lane 2, IPTG induced insoluble fraction; Lane 3, IPTG-induced soluble fraction. Arrows indicate target proteins.

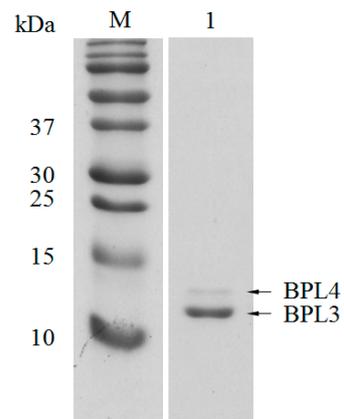


Figure S3. Purification of native BPL3. M, Molecular weight marker; Lane 1, Purified BPL3. Arrows indicate purified proteins.

Table S1. Glycan array of recombinant and native BPL3. Binding signals were normalized using a program provided by RayBioTech

Substrates	RFU (Normalized)	
	rD2BPL3	Native BPL3
Positive Control	29,419	29,419
Neg	75	50
1	860	148
2	510	161
3	1,322	1,025
4	1,313	205
5	86	101
6	3,164	348
7	698	97
8	492	121
9	1,646	201
10	729	685
11	165	120
12	183	298
13	325	108
14	229	119
15	660	70
16	204	170
17	644	119
18	187	85
19	786	219
20	87	58
21	46	11
22	57	7
23	266	-36
24	991	178
25	647	255
26	132	130
27	864	125
28	148	116
29	260	78
30	64	5,075
31	66	105
32	93	104
33	235	25
34	973	138
35	346	45
36	721	1,082

37	797	351
38	401	104
39	77	1,398
40	326	72
41	993	134
42	102	65
43	40	46
44	70	256
45	1,290	173
46	565	42
47	53	12
48	264	74
49	43	2
50	54	2
51	135	57
52	595	99
53	169	84
54	214	64
55	138	69
56	105	80
57	59	181
58	57	72
59	158	72
60	81	44
61	148	84
62	108	14
63	49	24
64	122	60
65	45	47
66	39	17
67	318	240
68	247	101
69	421	2,518
70	789	209
71	993	96
72	191	338
73	131	154
74	238	12
75	615	99
76	227	265
77	941	190
78	796	19

79	376	62
80	181	43
81	200	277
82	108	47
83	72	90
84	113	33
85	150	146
86	529	89
87	1,119	225
88	368	141
89	155	84
90	45	44
91	108	59
92	177	34
93	122	72
94	102	35
95	115	88
96	104	76
97	128	102
98	61	28
99	333	129
100	75	52