

## Formatted Alignments

PA 245625 MiSeq	1	ATGGAAGACTTTGTGCGACAATGCTTCAATCCAATGATTGTCGAGCTTGCGGAGAAAGCA	60
PA 245626 Method A	1	ATGGAAGACTTTGTGCGACAATGCTTCAATCCAATGATTGTCGAGCTTGCGGAGAAAGCA	60
PA 245626 Method K	1	ATGGAAGACTTTGTGCGACAATGCTTCAATCCAATGATTGTCGAGCTTGCGGAGAAAGCA	60
PA 245626 Method N	1	ATGGAAGATTTTGTGCGACAATGCTTCAATCCAATGATTGTCGAGCTTGCGGAGAAAGCA	60
PA 245625 MiSeq	61	ATGAAAGAATATGGGGAAGATCCGAAAATCGAGACAAACAAATTTGCCGCAATATGCACA	120
PA 245626 Method A	61	ATGAAAGAATATGGGGAAGATCCGAAAATCGAGACAAACAAATTTGCCGCAATATGCACA	120
PA 245626 Method K	61	ATGAAAGAATATGGGGAAGATCCGAAAATCGAGACAAACAAATTTGCCGCAATATGCACA	120
PA 245626 Method N	61	ATGAAAGAATATGGGGAAGATCCGAAAATCGAGACAAACAAATTTGCCGCAATATGCACA	120
PA 245625 MiSeq	121	CAC TTAGAAGTCTGTTTCATGTATTCGGATTTCCATTTTATTGATGAACGAGGCGAATCA	180
PA 245626 Method A	121	CAC TTAGAAGTCTGTTTCATGTATTCGGATTTCCATTTTATTGATGAACGAGGCGAATCA	180
PA 245626 Method K	121	CAC TTAGAAGTCTGTTTCATGTATTCGGATTTCCATTTTATTGATGAACGAGGCGAATCA	180
PA 245626 Method N	121	CAC TTAGAAGTCTGTTTCATGTATTCGGATTTCCATTTTATTGATGAACGAGGCGAATCA	180
PA 245625 MiSeq	181	ATGATTGTAGAATCTGGCGATCCAAATGCATTATTGAAACACCGATTTGAGATAATCGAA	240
PA 245626 Method A	181	ATGATTGTAGAATCTGGCGATCCAAATGCATTATTGAAACACCGATTTGAGATAATCGAA	240
PA 245626 Method K	181	ATGATTGTAGAATCTGGCGATCCAAATGCATTATTGAAACACCGATTTGAGATAATCGAA	240
PA 245626 Method N	181	ATGATTGTAGAATCTGGCGATCCAAATGCATTATTGAAACACCGATTTGAGATAATCGAA	240
PA 245625 MiSeq	241	GGGAGAGACCGAGCAATGGCCTGGACAGTGGTGAATAGTATCTGCAACACCACAGGGGTC	300
PA 245626 Method A	241	GGGAGAGACCGAGCAATGGCCTGGACAGTGGTGAATAGTATCTGCAACACCACAGGGGTC	300
PA 245626 Method K	241	GGGAGAGACCGAGCAATGGCCTGGACAGTGGTGAATAGTATCTGCAACACCACAGGGGTC	300
PA 245626 Method N	241	GGGAGAGACCGAGCAATGGCCTGGACAGTGGTGAATAGTATCTGCAACACCACAGGGGTC	300
PA 245625 MiSeq	301	GAAAAGCCCAAATTCCTCCCTGATTGTATGACTACAAAGAGAACCGATTCATTGAAATT	360
PA 245626 Method A	301	GAAAAGCCCAAATTCCTCCCTGATTGTATGACTACAAAGAGAACCGATTCATTGAAATT	360
PA 245626 Method K	301	GAAAAGCCCAAATTCCTCCCTGATTGTATGACTACAAAGAGAACCGATTCATTGAAATT	360
PA 245626 Method N	301	GAAAAGCCCAAATTCCTCCCTGATTGTATGACTACAAAGAGAACCGATTCATTGAAATT	360

PA 245625 MiSeq	361	GGAGTAACGCGAAGGGAAGTTCACATATACTATTTAGAAAAAGCCAACAAGATAAAATCA	420
PA 245626 Method A	361	GGAGTAACGCGAAGGGAAGTTCACATATACTATTTAGAAAAAGCCAACAAGATAAAATCA	420
PA 245626 Method K	361	GGAGTAACGCGAAGGGAAGTTCACATATACTATTTAGAAAAAGCCAACAAGATAAAATCA	420
PA 245626 Method N	361	GGAGTAACGCGAAGGGAAGTTCACATATACTATTTAGAAAAAGCCAACAAGATAAAATCA	420

PA 245625 MiSeq	421	GAGAAAACACATATTCACATATTCTCATTCACTGGAGAGGAAATGGCCACCAAGGCGGAC	480
PA 245626 Method A	421	GAGAAAACACATATTCACATATTCTCATTCACTGGAGAGGAAATGGCCACCAAGGCGGAC	480
PA 245626 Method K	421	GAGAAAACACATATTCACATATTCTCATTCACTGGAGAGGAAATGGCCACCAAGGCGGAC	480
PA 245626 Method N	421	GAGAAAACACATATTCACATATTCTCATTCACTGGAGAGGAAATGGCCACCAAGGCGGAC	480

PA 245625 MiSeq	481	TACACCCTTGATGAAGAGAGCAGAGCAAGAATAAAAAACCAGACTGTTCACTATAAGACAA	540
PA 245626 Method A	481	TACACCCTTGATGAAGAGAGCAGAGCAAGAATAAAAAACCAGACTGTTCACTATAAGACAA	540
PA 245626 Method K	481	TACACCCTTGATGAAGAGAGCAGAGCAAGAATAAAAAACCAGACTGTTCACTATAAGACAA	540
PA 245626 Method N	481	TACACCCTTGATGAAGAGAGCAGAGCAAGAATAAAAAACCAGACTGTTCACTATAAGACAA	540

PA 245625 MiSeq	541	GAAATAGCCAGCAGAGGTCTATGGGATTCCTTTCGTCAGTCCGAGAGAGGCGAAGAGACA	600
PA 245626 Method A	541	GAAATAGCCAGCAGAGGTCTATGGGATTCCTTTCGTCAGTCCGAGAGAGGCGAAGAGACA	600
PA 245626 Method K	541	GAAATAGCCAGCAGAGGTCTATGGGATTCCTTTCGTCAGTCCGAGAGAGGCGAAGAGACA	600
PA 245626 Method N	541	GAAATAGCCAGCAGAGGTCTATGGGATTCCTTTCGTCAGTCCGAGAGAGGCGAAGAGACA	600

PA 245625 MiSeq	601	ATTGAAGAAAAGATTTGAAATCACAGGAACCATGCGCAGGCTTGCCGACCAAAGTCTTCCA	660
PA 245626 Method A	601	ATTGAAGAAAAGATTTGAAATCACAGGAACCATGCGCAGGCTTGCCGACCAAAGTCTTCCA	660
PA 245626 Method K	601	ATTGAAGAAAAGATTTGAAATCACAGGAACCATGCGCAGGCTTGCCGACCAAAGTCTTCCA	660
PA 245626 Method N	601	ATTGAAGAAAAGATTTGAAATCACAGGAACCATGCGCAGGCTTGCCGACCAAAGTCTTCCA	660

PA 245625 MiSeq	661	CCGAACCTTCTCCAGCCTTGAAAACCTTTAGAGCCTATGTGGATGGATTTCGAACCGAACGGC	720
PA 245626 Method A	661	CCGAACCTTCTCCAGCCTTGAAAACCTTTAGAGCCTATGTGGATGGATTTCGAACCGAACGGC	720
PA 245626 Method K	661	CCGAACCTTCTCCAGCCTTGAAAACCTTTAGAGCCTATGTGGATGGATTTCGAACCGAACGGC	720
PA 245626 Method N	661	CCGAACCTTCTCCAGCCTTGAAAACCTTTAGAGCCTATGTGGATGGATTTCGAACCGAACGGC	720

PA 245625 MiSeq	721	TGCATTGAGGGCAAACCTTTCTCAAATGTCAAAAGAAGTGAACGCCAGAATTGAGCCATTT	780
PA 245626 Method A	721	TGCATTGAGGGCAAACCTTTCTCAAATGTCAAAAGAAGTGAACGCCAGAATTGAGCCATTT	780
PA 245626 Method K	721	TGCATTGAGGGCAAACCTTTCTCAAATGTCAAAAGAAGTGAACGCCAGAATTGAGCCATTT	780
PA 245626 Method N	721	TGCATTGAGGGCAAACCTTTCTCAAATGTCAAAAGAAGTGAACGCCAGAATTGAGCCATTT	780
PA 245625 MiSeq	781	CTGAAGACAACACCACGCCCTCTCAGATTACCTGATGGGCCTCCCTGTTCTCAGCGGTCTG	840
PA 245626 Method A	781	CTGAAGACAACACCACGCCCTCTCAGATTACCTGATGGGCCTCCCTGTTCTCAGCGGTCTG	840
PA 245626 Method K	781	CTGAAGACAACACCACGCCCTCTCAGATTACCTGATGGGCCTCCCTGTTCTCAGCGGTCTG	840
PA 245626 Method N	781	CTGAAGACAACACCACGCCCTCTCAGATTACCTGATGGGCCTCCCTGTTCTCAGCGGTCTG	840
PA 245625 MiSeq	841	AAGTTCTTGCTGATGGATGCCCTTAAGTTGAGCATCGAAGACCCTAGCCATGAGGGGGAG	900
PA 245626 Method A	841	AAGTTCTTGCTGATGGATGCCCTTAAGTTGAGCATCGAAGACCCTAGCCATGAGGGGGAGG	900
PA 245626 Method K	841	AAGTTCTTGCTGATGGATGCCCTTAAGTTGAGCATCGAAGACCCTAGCCATGAGGGGGAG	900
PA 245626 Method N	841	AAGTTCTTGCTGATGGATGCCCTTAAGTTGAGCATCGAAGACCCTAGCCATGAGGGGGAG	900
PA 245625 MiSeq	901	GGCATACCGCTGTATGATGCAATCAAATGCATGAAGACATTTTTTGGCTGGAAAGAGCCC	960
PA 245626 Method A	901	GGCATACCGCTGTATGATGCAATCAAATGCATGAAGACATTTTTTGGCTGGAAAGAGCCC	960
PA 245626 Method K	901	GGCATACCGCTGTATGATGCAATCAAATGCATGAAGACATTTTTTGGCTGGAAAGAGCCC	960
PA 245626 Method N	901	GGCATACCGCTGTATGATGCAATCAAATGCATGAAGACATTTTTTGGCTGGAAAGAGCCC	960
PA 245625 MiSeq	961	AACATCGTAAAGCCGCATGAGAAAGGCATAAACCCCTAATTACCTCCTGGCTTGGAAGCAG	1020
PA 245626 Method A	961	AACATCGTAAAGCCGCATGAGAAAGGCATAAACCCCTAATTACCTCCTGGCTTGGAAGCAG	1020
PA 245626 Method K	961	AACATCGTAAAGCCGCATGAGAAAGGCATAAACCCCTAATTACCTCCTGGCTTGGAAGCAG	1020
PA 245626 Method N	961	AACATCGTAAAGCCGCATGAGAAAGGCATAAACCCCTAATTACCTCCTGGCTTGGAAGCAG	1020
PA 245625 MiSeq	1021	GTGCTGGCAGAACTTCAAGACATTGAAAATGAGGAGAAAATTCCAAAAACAAAGAACATG	1080
PA 245626 Method A	1021	GTGCTGGCAGAACTTCAAGACATTGAAAATGAGGAGAAAATTCCAAAAACAAAGAACATG	1080
PA 245626 Method K	1021	GTGCTGGCAGAACTTCAAGACATTGAAAATGAGGAGAAAATTCCAAAAACAAAGAACATG	1080
PA 245626 Method N	1021	GTGCTGGCAGAACTTCAAGACATTGAAAATGAGGAGAAAATTCCAAAAACAAAGAACATG	1080

PA 245625 MiSeq	1081	AAGAAAACAAGCCAATTGAAGTGGGCACTTGGTGAGAACATGGCTCCAGAAAAAGTGGAC	1140
PA 245626 Method A	1081	AAGAAAACAAGCCAATTGAAGTGGGCACTTGGTGAGAACATGGCTCCAGAAAAAGTGGAC	1140
PA 245626 Method K	1081	AAGAAAACAAGCCAATTGAAGTGGGCACTTGGTGAGAACATGGCTCCAGAAAAAGTGGAC	1140
PA 245626 Method N	1081	AAGAAAACAAGCCAATTGAAGTGGGCACTTGGTGAGAACATGGCTCCAGAAAAAGTGGAC	1140

PA 245625 MiSeq	1141	TTTGAGGACTGCAAAGATGTTAGCGATCTAAGACAGTACGACAGTGACGAACCAGAGTCT	1200
PA 245626 Method A	1141	TTTGAGGACTGCAAAGATGTTAGCGATCTAAGACAGTACGACAGTGACGAACCAGAGTCT	1200
PA 245626 Method K	1141	TTTGAGGACTGCAAAGATGTTAGCGATCTAAGACAGTACGACAGTGACGAACCAGAGTCT	1200
PA 245626 Method N	1141	TTTGAGGACTGCAAAGATGTTAGCGATCTAAGACAGTACGACAGTGACGAACCAGAGTCT	1200

PA 245625 MiSeq	1201	AGATCACTAGCAAGCTGGATTTCAGAGTGAATTCAACAAGGCATGCGAACTGACAGATTCTG	1260
PA 245626 Method A	1201	AGATCACTAGCAAGCTGGATTTCAGAGTGAATTCAACAAGGCATGCGAACTGACAGATTCTG	1260
PA 245626 Method K	1201	AGATCACTAGCAAGCTGGATTTCAGAGTGAATTCAACAAGGCATGCGAACTGACAGATTCTG	1260
PA 245626 Method N	1201	AGATCACTAGCAAGCTGGATTTCAGAGTGAATTCAACAAGGCATGCGAACTGACAGATTCTG	1260

PA 245625 MiSeq	1261	AGTTGGATTGAACTTGATGAGATAGGGGAAGACGTTGCTCCAATCGAACACATTGCGAGT	1320
PA 245626 Method A	1261	AGTTGGATTGAACTTGATGAGATAGGGGAAGACGTTGCTCCAATCGAACACATTGCGAGT	1320
PA 245626 Method K	1261	AGTTGGATTGAACTTGATGAGATAGGGGAAGACGTTGCTCCAATCGAACACATTGCGAGT	1320
PA 245626 Method N	1261	AGTTGGATTGAACTTGATGAGATAGGGGAAGACGTTGCTCCAATCGAACACATTGCGAGT	1320

PA 245625 MiSeq	1321	GTGAGGAGGAACATATTTACAGCGGAGGTATCCCATTCGAGGGCCACTGAATACATAATG	1380
PA 245626 Method A	1321	GTGAGGAGGAACATATTTACAGCGGAGGTATCCCATTCGAGGGCCACTGAATACATAATG	1380
PA 245626 Method K	1321	GTGAGGAGGAACATATTTACAGCGGAGGTATCCCATTCGAGGGCCACTGAATACATAATG	1380
PA 245626 Method N	1321	GTGAGGAGGAACATATTTACAGCGGAGGTATCCCATTCGAGGGCCACTGAATACATAATG	1380

PA 245625 MiSeq	1381	AAGGGAGTATACATAAACACAGCCCTATTGAATGCATCCTGTGCAGCCATGGATGACTTC	1440
PA 245626 Method A	1381	AAGGGAGTATACATAAACACAGCCCTATTGAATGCATCCTGTGCAGCCATGGATGACTTC	1440
PA 245626 Method K	1381	AAGGGAGTATACATAAACACAGCCCTATTGAATGCATCCTGTGCAGCCATGGATGACTTC	1440
PA 245626 Method N	1381	AAGGGAGTATACATAAACACAGCCCTATTGAATGCATCCTGTGCAGCCATGGATGACTTC	1440

PA 245625 MiSeq	1441	CAACTGATTCCAATGATAAGTAAGTGCAGAACTAAAGAAGGAAGACGGAAGACAAATCTG	1500
PA 245626 Method A	1441	CAACTGATTCCAATGATAAGTAAGTGCAGAACTAAAGAAGGAAGACGGAAGACAAATCTG	1500
PA 245626 Method K	1441	CAACTGATTCCAATGATAAGTAAGTGCAGAACTAAAGAAGGAAGACGGAAGACAAATCTG	1500
PA 245626 Method N	1441	CAACTGATTCCAATGATAAGTAAGTGCAGAACTAAAGAAGGAAGACGGAAGACAAATCTG	1500

PA 245625 MiSeq	1501	TATGGATTCATTATAAAAGGAAGATCCCATTTGAGGAATGACACCGATGTGGTAAACTTT	1560
PA 245626 Method A	1501	TATGGATTCATTATAAAAGGAAGATCCCATTTGAGGAATGACACCGATGTGGTAAACTTT	1560
PA 245626 Method K	1501	TATGGATTCATTATAAAAGGAAGATCCCATTTGAGGAATGACACCGATGTGGTAAACTTT	1560
PA 245626 Method N	1501	TATGGATTCATTATAAAAGGAAGATCCCATTTGAGGAATGACACCGATGTGGTAAACTTT	1560

PA 245625 MiSeq	1561	GTGAGCATGGAATTCTCTCTAACTGACCCGAGGCTAGAGCCACACAAATGGGAAAAGTAC	1620
PA 245626 Method A	1561	GTGAGCATGGAATTCTCTCTAACTGACCCGAGGCTAGAGCCACACAAATGGGAAAAGTAC	1620
PA 245626 Method K	1561	GTGAGCATGGAATTCTCTCTAACTGACCCGAGGCTAGAGCCACACAAATGGGAAAAGTAC	1620
PA 245626 Method N	1561	GTGAGCATGGAATTCTCTCTAACTGACCCGAGGCTAGAGCCACACAAATGGGAAAAGTAC	1620

PA 245625 MiSeq	1621	TGTGTTCTTGAGATAGGAGACATGCTCCTACGGACTGCAATAGGCCAAGTGTTCGAGGCCC	1680
PA 245626 Method A	1621	TGTGTTCTTGAGATAGGAGACATGCTCCTACGGACTGCAATAGGCCAAGTGTTCGAGGCCC	1680
PA 245626 Method K	1621	TGTGTTCTTGAGATAGGAGACATGCTCCTACGGACTGCAATAGGCCAAGTGTTCGAGGCCC	1680
PA 245626 Method N	1621	TGTGTTCTTGAGATAGGAGACATGCTCCTACGGACTGCAATAGGCCAAGTGTTCGAGGCCC	1680

PA 245625 MiSeq	1681	ATG TTCCTGTATGTGAGAACCAATGGGACTTCCAAGATCAAAATGAAATGGGGCATGGAG	1740
PA 245626 Method A	1681	ATG TTCCTGTATGTGAGAACCAATGGGACTTCCAAGATCAAAATGAAATGGGGCATGGAG	1740
PA 245626 Method K	1681	ATG TTCCTGTATGTGAGAACCAATGGGACTTCCAAGATCAAAATGAAATGGGGCATGGAG	1740
PA 245626 Method N	1681	ATG TTCCTGTATGTGAGAACCAATGGGACTTCCAAGATCAAAATGAAATGGGGCATGGAG	1740

PA 245625 MiSeq	1741	ATGAGGCGATGCCTTCTTCAGTCCCTTCAACAAATTGAGAGCATGATTGAGGCCGAATCT	1800
PA 245626 Method A	1741	ATGAGGCGATGCCTTCTTCAGTCCCTTCAACAAATTGAGAGCATGATTGAGGCCGAATCT	1800
PA 245626 Method K	1741	ATGAGGCGATGCCTTCTTCAGTCCCTTCAACAAATTGAGAGCATGATTGAGGCCGAATCT	1800
PA 245626 Method N	1741	ATGAGGCGATGCCTTCTTCAGTCCCTTCAACAAATTGAGAGCATGATTGAGGCCGAATCT	1800

PA 245625 MiSeq	1801	TCTGTCAAAGAGAAGGACATGTCCAAGGAATTCTTTGAAAACAAATCAGAAACATGGCCA	1860
PA 245626 Method A	1801	TCTGTCAAAGAGAAGGACATGTCCAAGGAATTCTTTGAAAACAAATCAGAAACATGGCCA	1860
PA 245626 Method K	1801	TCTGTCAAAGAGAAGGACATGTCCAAGGAATTCTTTGAAAACAAATCAGAAACATGGCCA	1860
PA 245626 Method N	1801	TCTGTCAAAGAGAAGGACATGTCCAAGGAATTCTTTGAAAACAAATCAGAAACATGGCCA	1860

PA 245625 MiSeq	1861	ATTGGAGAATCACCCAAAGGGGTGGAGGAAGGCTCTATTGGGAAAGTATGCAGAACATTG	1920
PA 245626 Method A	1861	ATTGGAGAATCACCCAAAGGGGTGGAGGAAGGCTCTATTGGGAAAGTATGCAGAACATTG	1920
PA 245626 Method K	1861	ATTGGAGAATCACCCAAAGGGGTGGAGGAAGGCTCTATTGGGAAAGTATGCAGAACATTG	1920
PA 245626 Method N	1861	ATTGGAGAATCACCCAAAGGGGTGGAGGAAGGCTCTATTGGGAAAGTATGCAGAACATTG	1920

PA 245625 MiSeq	1921	CTAGCAAAGTCTGTGTTCAACAGCCTATATGCATCTCCACAACCTCGAGGGGTTTTTCAGCT	1980
PA 245626 Method A	1921	CTAGCAAAGTCTGTGTTCAACAGCCTATATGCATCTCCACAAGCTCGAGGGGTTTTTCAGCT	1980
PA 245626 Method K	1921	CTAGCAAAGTCTGTGTTCAACAGCCTATATGCATCTCCACAACCTCGAGGGGTTTTTCAGCT	1980
PA 245626 Method N	1921	CTAGCAAAGTCTGTGTTCAACAGCCTATATGCATCTCCACAACCTCGAGGGGTTTTTCAGCT	1980

PA 245625 MiSeq	1981	GAATCAAGAAAATTGCTTCTCATTGTTTCAGGCACCTTAGGGACAACCTGGGACCTGGAACC	2040
PA 245626 Method A	1981	GAATCAAGAAAATTGCTTCTCATTGTTTCAGGCACCTTAGGGACAACCTGGGACCTGGAACC	2040
PA 245626 Method K	1981	GAATCAAGAAAATTGCTTCTCATTGTTTCAGGCACCTTAGGGACAACCTGGGACCTGGAACC	2040
PA 245626 Method N	1981	GAATCAAGAAAATTGCTTCTCATTGTTTCAGGCACCTTAGGGACAACCTGGGACCTGGAACC	2040

PA 245625 MiSeq	2041	TTTCGATCTTGGGGGGCTATATGAAGCAATTGAGGAGTGCCTGATTAACGATCCCTGGGTT	2100
PA 245626 Method A	2041	TTTCGATCTTGGGGGGCTATATGAAGCAATTGAGGAGTGCCTGATTAACGATCCCTGGGTT	2100
PA 245626 Method K	2041	TTTCGATCTTGGGGGGCTATATGAAGCAATTGAGGAGTGCCTGATTAACGATCCCTGGGTT	2100
PA 245626 Method N	2041	TTTCGATCTTGGGGGGCTATATGAAGCAATTGAGGAGTGCCTGATTAACGATCCCTGGGTT	2100

PA 245625 MiSeq	2101	TTGCTTAATGCGTCTTGGTTCAACTCCTTCCTCACACATGCACTGAAATAG	2151
PA 245626 Method A	2101	TTGCTTAATGCGTCTTGGTTCAACTCCTTCCTCACACATGCACTGAAATAG	2151
PA 245626 Method K	2101	TTGCTTAATGCGTCTTGGTTCAACTCCTTCCTCACACATGCACTGAAATAG	2151
PA 245626 Method N	2101	TTGCTTAATGCGTCTTGGTTCAACTCCTTCCTCACACATGCACTGAAATAG	2151