



An official website of the United States government

Here's how you know



The .gov means it's official.

Federal government websites often end in .gov or .mil. Before sharing sensitive information, make sure you're on a federal government site.



The site is secure.
The **https://** ensures that you are connecting to the official website and that any information you provide is encrypted and transmitted securely.

[Access keys](#) [NCBI Homepage](#) [MyNCBI Homepage](#) [Main Content](#) [Main Navigation](#)

BLAST[®] >> **Global Alignment** >> results for RID-PKDNW6MB114

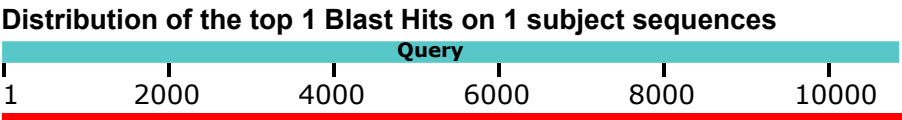
Job Title	SEQ_ID_NO11 ...
RID	PKDNW6MB114 Search expires on 11-09 08:54 am
Program	Needleman-Wunsch alignment of two sequences
Query ID	lcl Query_20657 (dna)
Query Descr	SEQ_ID_NO11 ...
Query Length	10807

Subject ID lcl|Query_20659 (dna)
Subject Descr [SEQ_ID_NO72 ...](#)
Subject Length 10773

Descriptions

Description	Score	Percent Ident	Accession
SEQ_ID_NO72	15582	89.00%	Query_20659

Graphic Summary



Alignments

Alignment view

Pairwise

☐ CDS feature

Restore defaults

SEQ_ID_NO72
Sequence ID: Query_20659 Length: 10773 Number of Matches: 1
Range 1: 1 to 10773

NW Score	Identities	Gaps	Strand	Frame
15582	9597/10808(89%)	36/10808(0%)	Plus/Plus	
Query 1	AGTTGTTGATCTGTGTGAGTCAGACTGCGACAGTTCGAGTCTGAAGCGAGAGCTAACAAC			60
Sbjct 1		CAGACTGCGACAGTTCGAGTTTGAAGCGAAAGCTAGCAAC		40
Query 61	AGTATCAACAGGTTTAAATTT - GGATTTGGAAACGAGAGTTTCTGGTCATGAAAAACCCAA			119
Sbjct 41	AGTATCAACAGGTTTATTTTGGATTGGAAACGAGAGTTTCTGGTCATGAAAAACCCAA			100
Query 120	AGAAGAAATCCGGAGGATTCCGGATTGTCAATATGCTAAAACGCGGAGTAGCCCGTGTA			179
Sbjct 101	AAAAGAAATCCGGAGGATTCCGGATTGTCAATATGCTAAAACGCGGAGTAGCCCGTGTA			160
Query 180	ACCCCTTGGGAGGTTTGAAGAGGTTGCCAGCCGGACTTCTGCTGGGTCATGGACCCATCA			239
Sbjct 161	GCCCCTTGGGGGCTTGAAGAGGCTGCCAGCCGGACTTCTGCTGGGTCATGGGCCATCA			220
Query 240	GAATGGTTTTGGCGATACTAGCCTTTTTGAGATTTACAGCAATCAAGCCATCACTGGGCC			299
Sbjct 221	GGATGGTCTTGGCGATTCTAGCCTTTTTGAGATTACCGGCAATCAAGCCATCACTGGGTC			280
Query 300	TTATCAACAGATGGGGTTCGTTGGGGAAAAAGAGGCTATGGAAATAATAAGAAAGTTCA			359
Sbjct 281	TCATCAATAGATGGGGTTCAGTGGGGAAAAAGAGGCTATGGAAATAATAAGAAAGTTCA			340
Query 360	AGAAAGATCTTGCTGCCATGTTGAGAATAATCAATGCTAGGAAAGAGAGGAAGAGACGTG			419
Sbjct 341	AGAAAGATCTGGCTGCCATGCTGAGAATAATCAATGCTAGGAAGGAGAAGAAGAGACGAG			400
Query 420	GCGCAGACACCAGCATCGGAATCATTGGCCTCCTGCTGACTACAGCCATGGCAGCAGAGA			479
Sbjct 401	GCGCAGATACTAGTGTGGAATTGTTGGCCTCCTGCTGACCACAGCTATGGCAGCGGAGG			460
Query 480	TCTAGACGCGGGAGTGCATACTACATGTACTTGGATAGGAGCGATGCCGGGAAGGCCA			539
Sbjct 461	TCTAGACGTGGGAGTGCATACTATATGTACTTGGACAGAAACGACGCTGGGAGAGCCA			520
Query 540	TTTCGTTTGCTACACATTGGGAGTGAACAAGTGCCACGTACAGATCATGGACCTCGGGC			599
Sbjct 521	TATCTTTTCCAACCACATTGGGGATGAATAAGTGTTATATACAGATCATGGATCTTGGAC			580
Query 600	ACATGTGTGACGCCACCATGAGTTATGAGTGCCTATGCTGGATGAGGGAGTGAACCAG			659
Sbjct 581	ACATGTGTGATGCCACCATGAGCTATGAATGCCCTATGCTGGATGAGGGGGTGAACCAG			640
Query 660	ATGATGTCGATTGCTGGTGCAACACGACATCAACTTGGGTTGTGTACGGAACCTGTCATC			719

Sbjct	641	ATGACGTCGATTGTTGGTGCAACACGACGTCACCTTGGGTTGTGTACGGAACCTGCCATC	700
Query	720	ACAAAAAAGGTGAGGCACGGCGATCTAGAAGAGCCGTGACGCTCCCTTCTCACTCTACAA	779
Sbjct	701	ACAAAAAAGGTGAAGCACGGAGATCTAGAAGAGCTGTGACGCTCCCTCCCATCCACTA	760
Query	780	GGAAAGTTGCAAACGCGGTGCGAGACCTGGTTAGAATCAAGAGAATACACGAAGCACTTGA	839
Sbjct	761	GGAAAGCTGCAAACGCGGTGCGAAACCTGGTTGGAATCAAGAGAATACACAAAGCACTTGA	820
Query	840	TCAAGGTTGAAAACGGATATTCAGGAACCCCGGGTTTGGCGTAGTGGCCGTTGCCATTG	899
Sbjct	821	TTAGAGTCGAAAATTGGATATTCAGGAACCTGGCTTCGCGTTAGCAGCAGCTGCCATCG	880
Query	900	CCTGGCTTTTGGGAAGCTCGACGAGCCAAAAGTCATATACTTGGTCATGATACTGCTGA	959
Sbjct	881	CTTGGCTTTTGGGAAGCTCAACGAGCCAAAAGTCATATACTTGGTCATGATACTGCTGA	940
Query	960	TTGCCCCGGCATAACAGTATCAGGTGCATTGGAGTCAGCAATAGAGACTTCGTGGAGGGCA	1019
Sbjct	941	TTGCCCCGGCATAACAGTATCAGGTGCATTGGAGTCAGCAATAGGGACTTTGTGGAAAGGTA	1000
Query	1020	TGTCAGGTGGGACCTGGGTTGATGTTGTCTTGGAAACATGGAGGCTGCGTTACCGTGATGG	1079
Sbjct	1001	TGTCAGGTGGGACTTGGGTTGATGTTGTCTTGGAAACATGGAGGTTGTGTCACCGTAATGG	1060
Query	1080	CACAGGACAAGCCAACAGTTGACATAGAGTTGGTCACGACGACGGTTAGTAACATGGCCG	1139
Sbjct	1061	CACAGGACAACACCGACTGTCGACATAGAGCTGGTTACAACAACAGTCAGCAACATGGCGG	1120
Query	1140	AGGTAAGATCCTATTGCTACGAGGCATCGATATCGGACATGGCTTCGGACAGTCGTTGCC	1199
Sbjct	1121	AGGTAAGATCCTACTGCTATGAGGCATCAATATCGGACATGGCTTCGGACAGCCGCTGCC	1180
Query	1200	CAACACAAGGTGAAGCCTACCTTGACAAGCAATCAGACACTCAATATGTCTGCAAAAGAA	1259
Sbjct	1181	CAACACAAGGTGAAGCCTACCTTGACAAGCAATCAGACACTCAATATGTCTGCAAAAGAA	1240
Query	1260	CATTAGTGGACAGAGGTTGGGGAAACGGTTGTGGACTTTTTGGCAAAGGGAGCTTGGTGA	1319
Sbjct	1241	CGTTAGTGGACAGAGGCTGGGGAAATGGATGTGGACTTTTTGGCAAAGGGAGCCTGGTGA	1300
Query	1320	CATGTGCCAAGTTTACGTGTTCTAAGAAGATGACCGGGAAGAGCATTCAACCGGAAAATC	1379
Sbjct	1301	CATGCGCTAAGTTTGCATGCTCCAAGAAAATGACCGGGAAGAGCATCCAGCCAGAGAATC	1360
Query	1380	TGGAGTATCGGATAATGCTATCAGTGCATGGCTCCCAGCATAGCGGGATGACTGTCAATG	1439
Sbjct	1361	TGGAGTACCGGATAATGCTGTGAGTTTATGGCTCCCAGCACAGTGGGATGATCGTTAATG	1420
Query	1440	ATATAGGATATGAAACTGACGAAAATAGAGCGAAAGTCGAGGTTACGCCTAATTCACCAA	1499
Sbjct	1421	ACACAGGACATGAAACTGATGAGAATAGAGCGAAGGTTGAGATAACGCCCAATTCACCAA	1480
Query	1500	GAGCGGAAGCAACCTTGGGAGGCTTTGGAAGCTTAGGACTTGACTGTGAACCAAGGACAG	1559
Sbjct	1481	GAGCCGAAGCCACCCTGGGGGTTTGGGAAGCTTAGGACTTGATTGTGAACCGAGGACAG	1540
Query	1560	GCCTTGACTTTTTCAGATCTGTATTACCTGACCATGAACAATAAGCATTGGTTGGTGCACA	1619
Sbjct	1541	GCCTTGACTTTTTCAGATTTGTATTACTTGACTATGAATAACAAGCACTGGTTGGTTCACA	1600
Query	1620	AAGAGTGGTTTCATGACATCCCATGCTTGGCATGCTGGGGCAGACACTGGAATCCAC	1679
Sbjct	1601	AGGAGTGGTTCCACGACATTCCATTACCTTGGCACGCTGGGGCAGACACCGGAATCCAC	1660
Query	1680	ACTGGAACAACAAGAGGCATTGGTAGAATTCAGGATGCCACGCCAAGAGGCAAAACCG	1739
Sbjct	1661	ACTGGAACAACAAGAAGCACTGGTAGAGTTCAAGGACGCACATGCCAAAAGGCAAACTG	1720
Query	1740	TCGTCGTTCTGGGGAGCCAGGAAGGAGCGTTACACGGCTCTCGCTGGAGCTCTAGAGG	1799
Sbjct	1721	TCGTGGTTCTAGGGAGTCAAGAAGGAGCAGTTACACGGCCCTTGCTGGAGCTCTGGAGG	1780
Query	1800	CTGAGATGGATGGTGCAAAGGGAAAGCTGTTCTCTGGCCATTTGAAATGCCGCCTAAAAA	1859
Sbjct	1781	CTGAGATGGATGGTGCAAAGGGAAAGCTGTCTCTGGCCACTTGAAATGTCGCTGAAAA	1840
Query	1860	TGGACAAGCTTAGATTGAAGGGCGTGTCTATCTCTTGTGCACTGCGGCATTACATTCA	1919
Sbjct	1841	TGGATAAATCTAGATTGAAGGGCGTGTCTATCTCTTGTGTACCGCAGCGTTACATTCA	1900
Query	1920	CCAAGGTCCAGCTGAAACACTGCATGGAACAGTCACAGTGGAGGTGCAGTATGCAGGGA	1979
Sbjct	1901	CCAAGATCCCGGCTGAAACACTGCACGGGACAGTCACAGTGGAGGTACAGTACGCAGGGA	1960
Query	1980	CAGATGGACCTTGCAAGATCCAGTCCAGATGGCGGTGGACATGCAGACCCTGACCCAG	2039
Sbjct	1961	CAGATGGACCTTGCAAGGTTCCAGCTCAGATGGCGGTGGACATGCAAACTCTGACCCAG	2020
Query	2040	TTGGAAGGCTGATAACCGCCAACCCCGTGATTACTGAAAGCACTGAGAAGCTCAAGATGA	2099

```

Sbjct  2021  TTGGGAGGTTGATAACCGCTAACCCCGTAATCACTGAAAGCACTGAGAACTCTAAGATGA 2080
Query   2100  TGTGGAGCTTGACCCACCATTTGGGGATTCTTACATTGTCATAGGAGTTGGGGACAAGA 2159
Sbjct  2081  TGCTGGAACCTGATCCACCATTTGGGGACTCTTACATTGTCATAGGAGTCGGGGAGAAGA 2140
Query   2160  AAATCACCACCACTGGCATAGGAGTGGTAGCACCATCGGAAAGGCATTTGAGGCCACTG 2219
Sbjct  2141  AGATCACCACCACTGGCACAGGAGTGGCAGCACCATTGAAAAAGCATTTGAAGCCACTG 2200
Query   2220  TGAGAGGCGCCAAGAGAATGGCAGTCTTGGGGGATACAGCCTGGGACTTCGGATCAGTCG 2279
Sbjct  2201  TGAGAGGTGCCAAGAGAATGGCAGTCTTGGGAGACACAGCCTGGGACTTTGGATCAGTTG 2260
Query   2280  GGGGTGTGTTCAACTCACTGGGTAAGGGCATTCAACCAGATTTTGGAGCAGCCTTCAAAT 2339
Sbjct  2261  GAGGCGCTCTCAACTCATTGGGCAAGGGCATCCATCAAATTTTGGAGCAGCTTTCAAAT 2320
Query   2340  CACTGTTTGGAGGAATGTCCTGGTTCTCACAGATCCTCATAGGCACGCTGCTAGTGTGGT 2399
Sbjct  2321  CATTGTTTGGAGGAATGTCCTGGTTCTCACAAATCTCATTGGAACGTTGCTGATGTGGT 2380
Query   2400  TAGGTTTGAACACAAAGAATGGATCTATCTCCCTCACATGCTTGGCCCTGGGGGGAGTGA 2459
Sbjct  2381  TGGGTCTGAACACAAAGAATGGATCTATTTCCCTTATGTGCTTGGCCTTAGGGGGAGTGT 2440
Query   2460  TGATCTTCTCTCCACGGCTGTTTCTGCTGACGTGGGGTGCTCAGTGGACTTCTCAAAAA 2519
Sbjct  2441  TGATCTTCTTATCCACAGCTGTCTCTGCTGATGTGGGGTGCTCGGTGGACTTCTCAAAGA 2500
Query   2520  AGGAAACGAGATGTGGCACGGGGTATTCATCTATAATGATGTTGAAGCCTGGAGGGACC 2579
Sbjct  2501  AGGAGACGAGATGCGGTACAGGGGTGTTCTGCTATAACGACGTTGAAGCCTGGAGGGACA 2560
Query   2580  GGTACAAGTACCATCCTGACTCCCCCGCAGATTGGCAGCAGCAGTCAAGCAGGCCTGGG 2639
Sbjct  2561  GGTACAAGTACCATCCTGACTCCCCCGTAGATTGGCAGCAGCAGTCAAGCAAGCCTGGG 2620
Query   2640  AAGAGGGGATCTGTGGGATCTCATCCGTTTCAAGAATGGAAAACATCATGTGGAAATCAG 2699
Sbjct  2621  AAGATGGTATCTGTGGGATCTCCTCTGTTTCAAGAATGGAAAACATCATGTGGAGATCAG 2680
Query   2700  TAGAAGGGGAGCTCAATGCTATCCTAGAGGAGAATGGAGTTCAACTGACAGTTGTTGTGG 2759
Sbjct  2681  TAGAAGGGGAGCTCAACGCAATCCTGGAAGAGAATGGAGTTCAACTGACGGTCGTTGTGG 2740
Query   2760  GATCTGTAAAAAACCCCATGTGGAGAGGTCCACAAAGATTGCCAGTGCCTGTGAATGAGC 2819
Sbjct  2741  GATCTGTAAAAAACCCCATGTGGAGAGGTCCACAGAGATTGCCCGTGCTGTGAACGAGC 2800
Query   2820  TGCCCCATGGCTGGAAAGCCTGGGGGAAATCGTATTTTGTAGGGCGGCAAAGACCAACA 2879
Sbjct  2801  TGCCCCACGGCTGGAAGGCTTGGGGGAAATCGTACTTCGTGAGAGCAGCAAAGACAAATA 2860
Query   2880  ACAGTTTTGTTGTCGACGGTGACACACTGAAGGAATGTCCGCTTGAGCACAGAGCATGGA 2939
Sbjct  2861  ACAGCTTTGTCGTGGATGGTGACACACTGAAGGAATGCCCACTCAAACATAGAGCATGGA 2920
Query   2940  ATAGTTTTCTTGTGGAGGATCACGGGTTTGGAGTCTTCCACACCAAGTGTCTGGCTTAAGG 2999
Sbjct  2921  ACAGCTTTCTTGTGGAGGATCATGGGTTTGGGGTATTTCACTAGTGTCTGGCTCAAGG 2980
Query   3000  TCAGAGAAGATTACTCATTAGAATGTGACCCAGCCGTATAGGAACAGCTGTTAAGGGAA 3059
Sbjct  2981  TTAGAGAAGATTATTCATTAGAGTGTGATCCAGCCGTTATTGGAACAGCTGTTAAGGGAA 3040
Query   3060  GGGAGGCCCGCACAGTGATCTGGGCTATTGGATTGAAAGTGAAGAAGTGAACATGGA 3119
Sbjct  3041  AGGAGGCTGTACACAGTGATCTAGGCTACTGGATTGAGAGTGAGAAGAATGACACATGGA 3100
Query   3120  GGCTGAAGAGGGGCCACCTGATTGAGATGAAAACATGTGAATGGCCAAAGTCTCACACAT 3179
Sbjct  3101  GGCTGAAGAGGGGCCATCTGATCGAGATGAAAACATGTGAATGGCCAAAGTCCACACAT 3160
Query   3180  TGTGGACAGATGGAGTAGAAGAAAGTGATCTTATCATACCCAAGTCTTTAGCTGGTCCAC 3239
Sbjct  3161  TGTGGACAGATGGAATAGAAGAGAGTGATCTGATCATACCCAAGTCTTTAGCTGGGCCAC 3220
Query   3240  TCAGCCACCACAACACCAGAGAGGGTTACAGAACCCAAGTGAAGGGCCATGGCACAGTG 3299
Sbjct  3221  TCAGCCATCACAATACCAGAGAGGGGTACAGGACCCAAATGAAGGGCCATGGCACAGTG 3280
Query   3300  AAGAGCTTGAAATCCGGTTTGAGGAATGTCCAGGCACCAAGGTTTACGTGGAGGAGACAT 3359
Sbjct  3281  AAGAGCTTGAAATTCGGTTTGAGGAATGCCAGGCACTAAGGTCACGTGGAGGAAACAT 3340
Query   3360  GCGGAAGTGAAGGACCATCTCTGAGATCAACTACTGCAAGTGAAGGGTCAATTGAGGAAT 3419
Sbjct  3341  GTGGAACAAGAGGACCATCTCTGAGATCAACCCTGCAAGCGGAAGGGTGATCGAGGAAT 3400

```

Query	3420	GGTGCTGTAGGGAATGCACAATGCCCCACTATCGTTTCGAGCAAAAGACGGCTGCTGGT	3479
Sbjct	3401	GGTGCTGCAGGGAGTGCACAATGCCCCACTGTCTGTTCCGGGCTAAAGATGGCTGTTGGT	3460
Query	3480	ATGGAATGGAGATAAGGCCAGGAAAGAACAGAGAGCAACTTAGTGAGGTCAATGGTGA	3539
Sbjct	3461	ATGGAATGGAGATAAGGCCAGGAAAGAACAGAAAGTAACCTAGTAAGGTCAATGGTGA	3520
Query	3540	CAGCGGGGTCAACCGATCATATGGACCACCTTCTCTCTTGGAGTGCTTGTGATTCTACTCA	3599
Sbjct	3521	CTGCAGGATCAACTGATCACATGGATCACTTCTCCCTTGGAGTGCTTGTGATTCTGCTCA	3580
Query	3600	TGGTGCAGGAGGGGTGAAGAAGAGAATGACCACAAAGATCATCATGAGCACATCAATGG	3659
Sbjct	3581	TGGTGCAGGAAGGGCTGAAGAAGAGAATGACCACAAAGATCATCATAAGCACATCGATGG	3640
Query	3660	CAGTGCTGGTAGTCATGATCTTGGGAGGATTTTCAATGAGTGACCTGGCCAAGCTTGTGA	3719
Sbjct	3641	CAGTGCTGGTAGCTATGATCTTGGGAGGATTTTCAATGAGTGACCTGGCTAAGCTTGCAA	3700
Query	3720	TCCTGATGGGTGCTACTTTTCGAGAAATGAACACTGGAGGAGATGTAGCTCACTTGGCAT	3779
Sbjct	3701	TTTTGATGGGTGCCACCTTCGCGGAAATGAACACTGGAGGAGATGTAGCTCATCTGGCGC	3760
Query	3780	TGGTAGCGGCATTTAAAGTCAGACCAGCCTTGCTGGTCTCCTTCATTTTCAGAGCCAATT	3839
Sbjct	3761	TGATAGCGGCATTCAAAGTCAGACCAGCGTTGCTGGTATCTTTCATCTTCAGAGCTAATT	3820
Query	3840	GGACACCCCGTGAGAGCATGCTGCTAGCCCTGGCTTCGTGTCTTCTGCAAACTGCGATCT	3899
Sbjct	3821	GGACACCCCGTGAAAGCATGCTGCTGGCCTTGGCCTCGTGTCTTTTGCAAACTGCGATCT	3880
Query	3900	CTGCTCTTGAAAGGTGACTTGATGGTCCTCATTAAATGGATTTGCTTTGGCCTGGTTGGCAA	3959
Sbjct	3881	CCGCCTTGGAAGGCGACCTGATGGTTCTCATCAATGGTTTTGCTTTGGCCTGGTTGGCAA	3940
Query	3960	TTCGAGCAATGGCCGTGCCACGCACTGACAACATCGCTCTACCAATCTTGGCTGCTCTAA	4019
Sbjct	3941	TACGAGCGATGGTTGTTCCACGCACTGATAACATCACCTTGGCAATCCTGGCTGCTCTGA	4000
Query	4020	CACCACTAGCTCGAGGCACACTGCTCGTGGCATGGAGAGCGGGCCTGGCTACTTGTGGAG	4079
Sbjct	4001	CACCACTGGCCCGGGGCACACTGCTTGTGGCGTGGAGAGCAGGCCCTTGCTACTTGCGGGG	4060
Query	4080	GGATCATGCTCCTCTCCCTGAAAGGGAAAGGTAGTGTGAAGAAGAACCTGCCATTTGTCA	4139
Sbjct	4061	GGTTTATGCTCCTCTCTCTGAAGGGAAGAGGAGTGTGAAGAAGAACTTACCATTGTCA	4120
Query	4140	TGGCCCTGGGATTGACAGCTGTGAGGGTAGTAGACCCTATTAATGTGGTAGGACTACTGT	4199
Sbjct	4121	TGGCCCTGGGACTAACCGCTGTGAGGCTGGTTCGACCCCATCAACGTGGTGGGACTGCTGT	4180
Query	4200	TACTCACAAGGAGTGGGAAGCGGAGCTGGCCCCCTAGTGAAGTTCTCACAGCCGTTGGCC	4259
Sbjct	4181	TGCTCACAAGGAGTGGGAAGCGGAGCTGGCCCCCTAGCGAAGTACTCACAGCTGTTGGCC	4240
Query	4260	TGATATGTGCACTGGCCGGAGGGTTTGCCAAAGGCAGACATTGAGATGGCTGGACCCATGG	4319
Sbjct	4241	TGATATGCGCATTGGCTGGAGGGTTCGCCAAGGCAGATATAGAGATGGCTGGGCCCATGG	4300
Query	4320	CTGCAGTAGGCTTGCTAATTGTCAGCTATGTGGTCTCGGGAAAGAGTGTGGACATGTACA	4379
Sbjct	4301	CCCGGTCGGTCTGCTAATTGTCAGTTACGTGGTCTCAGGAAAGAGTGTGGACATGTACA	4360
Query	4380	TTGAAAGAGCAGGTGACATCACATGGGAAAAGGACGCGGAAGTCACTGGAAACAGTCCTC	4439
Sbjct	4361	TTGAAAGAGCAGGTGACATCACATGGGAAAAGATGCGGAAGTCACTGGAAACAGTCCCC	4420
Query	4440	GGCTTGACGTGGCACTGGATGAGAGTGGTGATTTCTCCTTGGTAGAGGAAGATGGTCCAC	4499
Sbjct	4421	GGCTCGATGTGGCGCTAGATGAGAGTGGTGATTTCTCCTTGGTGGAGGATGACGGTCCCC	4480
Query	4500	CCATGAGAGAGATCATACTTAAGGTGGTCCTGATGGCCATCTGTGGCATGAACCCAATAG	4559
Sbjct	4481	CCATGAGAGAGATCATACTCAAGGTGGTCCTGATGACCATCTGTGGCATGAACCCAATAG	4540
Query	4560	CTATACCTTTTGCTGCAGGAGCGTGGTATGTGTATGTGAAGACTGGGAAAAGGAGTGGCG	4619
Sbjct	4541	CCATACCTTTTGACGCTGGAGCGTGGTACGTATACGTGAAGACTGGAAAAGGAGTGGTG	4600
Query	4620	CCCTCTGGGACGTGCCTGCTCCCAAGAAAGTGAAGAAAGGAGAGACCACAGATGGAGTGT	4679
Sbjct	4601	CTCTATGGGATGTGCCTGCTCCCAAGGAAGTAAAAAGGGGAGACCACAGATGGAGTGT	4660
Query	4680	ACAGAGTGATGACTCGCAGACTGCTAGGTTCAACACAGGTTGGAGTGGGAGTCATGCAAG	4739
Sbjct	4661	ACAGAGTAATGACTCGTAGACTGCTAGGTTCAACACAAGTTGGAGTGGGAGTTATGCAAG	4720
Query	4740	AGGGAGTCTTCCACACCATGTGGCACGTTACAAAAGGAGCCGCACTGAGGAGCGGTGAGG	4799
Sbjct	4721	AGGGGGTCTTTCACACTATGTGGCACGTCACAAAAGGATCGCGCTGAGAAGCGGTGAAG	4780

Query	4800	GAAGACTTGATCCATACTGGGGGGATGTCAAGCAGGACTTGGTGTCTACTGTGGGCCTT	4859
Sbjct	4781	GGAGACTTGATCCATACTGGGGAGATGTCAAGCAGGATCTGGTGTCTACTGTGGTCCAT	4840
Query	4860	GGAAGTTGGATGCAGCTTGGGATGGACTCAGCGAGGTACAGCTTTTGGCCGTACCTCCCG	4919
Sbjct	4841	GGAAGCTAGATGCCGCTGGGACGGGCACAGCGAGGTGCAGCTCTTGGCCGTGCCCCCG	4900
Query	4920	GAGAGAGGGCCAGAAACATTAGACCTGCCTGGAATATTCAAGACAAAGGACGGGGACA	4979
Sbjct	4901	GAGAGAGAGCGAGGAACATCCAGACTCTGCCCGAATATTTAAGACAAAGGATGGGGACA	4960
Query	4980	TCGGAGCAGTTGCTCTGGACTACCCTGCAGGGACCTCAGGATCTCCGATCCTAGACAAAT	5039
Sbjct	4961	TTGGAGCGGTTGCGCTGGATTACCCAGCAGGAACCTCAGGATCTCCAATCCTAGACAAGT	5020
Query	5040	GTGGAAGAGTGATAGGACTCTATGGCAATGGGGTTGTGATCAAGAATGGAAGCTATGTTA	5099
Sbjct	5021	GTGGGAGAGTGATAGGACTTTATGGCAATGGGGTCGTGATCAAAAATGGGAGTTATGTTA	5080
Query	5100	GTGCTATAACCCAGGGAAAGAGGGAGGAGGAGACTCCGGTTGAATGTTTCGAACCCCTCGA	5159
Sbjct	5081	GTGCCATCACCCAAAGGGAGGAGGGAGGAAGAGACTCCTGTTGAGTGCTTCGAGCCTTCGA	5140
Query	5160	TGCTGAAGAAGAAGCAGCTAACTGTCTTGGATCTGCATCCAGGAGCCGAAAAACCAGGA	5219
Sbjct	5141	TGCTGAAGAAGAAGCAGCTAACTGTCTTAGACTTGCATCCTGGAGCTGGGAAAACCAGGA	5200
Query	5220	GAGTTCTTCTGAAATAGTCCGTGAAGCCATAAAAAAGAGACTCCGGACAGTGATCTTGG	5279
Sbjct	5201	GAGTTCTTCTGAAATAGTCCGTGAAGCCATAAAAAAAGACTCCGTAAGTGATCTTAG	5260
Query	5280	CACCAACTAGGGTTGTGCTGCTGAGATGGAGGAGGCCTTGGAGGACTTCCGGTGCGTT	5339
Sbjct	5261	CTCCAACAGGGTTGTGCTGCTGAAATGGAGGAAGCCCTTAGAGGGCTTCCAGTGCGTT	5320
Query	5340	ACATGACAACAGCAGTCAACGTCACCCATTCTGGGACAGAAATCGTTGATTTGATGTGCC	5399
Sbjct	5321	ATATGACAACAGCAGTCAATGTCACCCACTCTGGAACAGAAATCGTCGACTTAATGTGCC	5380
Query	5400	ATGCCACTTTCACCTTACGCTTACTACAACCCATCAGAGTCCCTAATTACAATCTCTACA	5459
Sbjct	5381	ATGCCACCTTTCACCTTACGCTTACTACAGCCAAATCAGAGTCCCAACTATAATCTGTATA	5440
Query	5460	TCATGGATGAAGCCCACTTACAGACCCCTCAAGTATAGCTGCAAGAGGATATATATCAA	5519
Sbjct	5441	TTATGGATGAGGCCCACTTACAGATCCCTCAAGTATAGCAGCAAGAGGATACATTTCAA	5500
Query	5520	CAAGGGTTGAAATGGGCGAGGCGGCTGCCATTTTTATGACTGCCACACCAGGAACCC	5579
Sbjct	5501	CAAGGGTTGAGATGGGCGAGGCGGCTGCCATCTTCATGACCGCCACGCCACCAGGAACCC	5560
Query	5580	GTGATGCGTTTCTGACTCTAACTACCAATCATGGACACAGAAGTGAAGTCCAGAGA	5639
Sbjct	5561	GTGACGCAATTTCCGGACTCCAACCTACCAATATGGACACCGAAGTGAAGTCCAGAGA	5620
Query	5640	GAGCCTGGAGCTCAGGCTTTGATTGGGTGACAGACCATTCTGGGAAAACAGTTTGGTTTG	5699
Sbjct	5621	GAGCCTGGAGCTCAGGCTTTGATTGGGTGACGGATCATCTGGGAAAACAGTTTGGTTTG	5680
Query	5700	TTCCAAGCGTGAGAAACGGAATGAAATCGCAGCCTGTCTGACAAAGGCTGGAAAGCGGG	5759
Sbjct	5681	TTCCAAGCGTGAGGAACGGCAATGAGATCGCAGCTTGTCTGACAAAGGCTGGAAACGGG	5740
Query	5760	TCATACAGCTCAGCAGGAAGACTTTTGGAGACAGAAATTCAGAAAACAAAAATCAAGAGT	5819
Sbjct	5741	TCATACAGCTCAGCAGAAAGACTTTTGGAGACAGAGTCCAGAAAACAAAACATCAAGAGT	5800
Query	5820	GGGACTTTGTCTAACAACCTGACATCTCAGAGATGGGCGCCAACTTCAAGGCTGACCGGG	5879
Sbjct	5801	GGGACTTTGTCTGACAACTGACATTTAGAGATGGGCGCCAACTTTAAAGCTGACCGTG	5860
Query	5880	TCATAGACTCTAGGAGATGCCTAAAACAGTCATACTTGATGGTGAGAGAGTCATCTTGG	5939
Sbjct	5861	TCATAGATTCCAGGAGATGCCTAAAGCCGGTCATACTTGATGGCGAGAGAGTCATCTTGG	5920
Query	5940	CTGGGCCCATGCCTGTGACGATGCTAGTGCTGCTCAGAGGAGAGGACGTATAGGCAGGA	5999
Sbjct	5921	CTGGACCCATGCCTGTGACACATGCCAGCGCTGCCAGAGGAGGGGGCGCATAGGCAGGA	5980
Query	6000	ACCCTAACAAACCTGGAGATGAGTACATGTATGGAGGTGGGTGTGAGAGACTGATGAAG	6059
Sbjct	5981	ATCCCAACAAACCTGGAGATGAGTATCTGTATGGAGGTGGGTGCGCAGAGACTGACGAAG	6040
Query	6060	GCCATGCACACTGGCTTGAAGCAAGAATGCTTCTTGACAACATCTACCTCCAGGATGGCC	6119
Sbjct	6041	ACCATGCACACTGGCTTGAAGCAAGAATGCTCCTTGACAATATTTACCTCCAAGATGGCC	6100
Query	6120	TCATAGCCTCGCTCTATCGGCCTGAGGCCGATAAGGTAGCCGCCATTGAGGGAGAGTTTA	6179

Sbjct 6101 TCATAGCCTCGCTCTATCGACCTGAGGCCGACAAAGTAGCAGCCATTGAGGGAGAGTTCA 6160

Query 6180 AGCTGAGGACAGAGCAAAGGAAGACCTTCGTGGAACATCATGAAGAGAGGAGACCTTCCCG 6239

Sbjct 6161 AGCTTAGGACGGAGCAAAGGAAGACCTTTGTGGAACATCATGAAAAGAGGAGATCTTCCTG 6220

Query 6240 TCTGGCTAGCCTATCAGGTTGCATCTGCCGGAATAACTTACACAGACAGAAGATGGTGCT 6299

Sbjct 6221 TTTGGCTGGCCTATCAGGTTGCATCTGCCGGAATAACCTACACAGATAGAAGATGGTGCT 6280

Query 6300 TTGATGGCACAACCAACAACACCATAATGGAAGACAGCGTACCAGCAGAGGTGTGGACAA 6359

Sbjct 6281 TTGATGGCACGACCAACAACACCATAATGGAAGACAGTGTGCCGGCAGAGGTGTGGACCA 6340

Query 6360 AGTATGGAGAGAAGAGAGTCTCAAACCGAGATGGATGGATGCTAGGGTCTGTTTCAGACC 6419

Sbjct 6341 GACACGGAGAGAAAAGAGTCTCAAACCGAGGTGGATGGACGCCAGAGTTTGTTCAGATC 6400

Query 6420 ATGCGGCCCTGAAGTCGTTCAAAGAATTGCGCGCTGGAAAAAGAGGAGCGGCTTTGGGAG 6479

Sbjct 6401 ATGCGGCCCTGAAGTCATTCAAGGAGTTTGCCTGGGAAAAGAGGAGCGGCTTTGGGAG 6460

Query 6480 TAATGGAGGCCCTGGGAACACTGCCAGGACACATGACAGAGAGGTTTCAGGAAGCCATTG 6539

Sbjct 6461 TGATGGAAGCCCTGGGAACACTGCCAGGACACATGACAGAGAGATTCCAGGAAGCCATTG 6520

Query 6540 ACAACCTCGCCGTGCTCATGCGAGCAGAGACTGGAAGCAGGCCCTTATAAGGCAGCGGCAG 6599

Sbjct 6521 ACAACCTCGCTGTGCTCATGCGGGCAGAGACTGGAAGCAGGCCCTTACAAAGCCGCGGCGG 6580

Query 6600 CCCAACTGCCGGAGACCCTAGAGACCATTATGCTCTTAGGTTTGCTGGGAACAGTTTCAC 6659

Sbjct 6581 CCCAATTGCCGGAGACCCTAGAGACCATTATGCTTTTGGGTTTGCTGGGAACAGTCTCGC 6640

Query 6660 TGGGGATCTTCTTCGTCTTGATGCGGAATAAGGGCATCGGGAAGATGGGCTTTGGAATGG 6719

Sbjct 6641 TGGGAATCTTTTTCTGCTTGATGAGGAACAAGGGCATAGGGAAGATGGGCTTTGGAATGG 6700

Query 6720 TAACCCCTTGGGGCCAGTGCATGGCTCATGTGGCTTTCGGAATTGAACCAGCCAGAATTG 6779

Sbjct 6701 TGACTCTTGGGGCCAGCGCATGGCTCATGTGGCTCTCGGAATTGAGCCAGCCAGAATTG 6760

Query 6780 CATGTGTCCTCATTGTTGTGTTTTTATTACTGGTGGTGCTCATACCCGAGCCAGAGAAGC 6839

Sbjct 6761 CATGTGTCCTCATTGTTGTGTTCTATTGCTGGTGGTGCTCATACCTGAGCCAGAAAAGC 6820

Query 6840 AAAGATCTCCCCAAGATAACCAGATGGCAATTATCATCATGGTGGCAGTGGGCTTCTAG 6899

Sbjct 6821 AAAGATCTCCCCAGGACAACCAATGGCAATCATCATCATGGTAGCAGTAGGTCTTCTGG 6880

Query 6900 GTTTGATAACTGCAACGAACCTTGGATGGCTGGAAAGAACAAAAATGACATAGCTCATC 6959

Sbjct 6881 GCTTGATTACCGCCAATGAACTCGGATGGTTGGAGAGAACAAAGAGTGACCTAAGCCATC 6940

Query 6960 TAATGGGAAGGAGAGAAGAAGGAGCAACCATGGGATTCTCAATGGACATTGATCTGCGGC 7019

Sbjct 6941 TAATGGGAAGGAGAGAGGAGGGGGCAACCATAGGATTCTCAATGGACATTGACCTGCGGC 7000

Query 7020 CAGCCTCCGCTGGGCTATCTATGCCGCAATTGACAACCTCATCACCCAGCTGTCCAAC 7079

Sbjct 7001 CAGCCTCAGCTTGGGCCATCTATGCTGCCTTGACAACCTTTCATTACCCAGCCGTCCAAC 7060

Query 7080 ATGCGGTAACCACTTCATACAACAACTACTCCTTAATGGCGATGGCCACACAAGCTGGAG 7139

Sbjct 7061 ATGCAGTGACCACCTTCATACAACAACTACTCCTTAATGGCGATGGCCACGCAAGCTGGAG 7120

Query 7140 TGCTGTTTTGGCATGGGCAAAGGGATGCCATTTATGCATGGGACCTTTGGAGTCCCCTGC 7199

Sbjct 7121 TGTGTTTTGGTATGGGCAAAGGGATGCCATTTACGCATGGGACTTTGGAGTCCCCTGC 7180

Query 7200 TAATGATGGGTTGCTATTACAAATTAACACCCCTGACTCTGATAGTAGCTATCATTCTGC 7259

Sbjct 7181 TAATGATAGGTTGCTACTACAATTAACACCCCTGACCTTAATAGTGGCCATCATTTTGC 7240

Query 7260 TTGTGGCGCACTACATGTACTTGATCCCAGGCTTACAAGCGGCAGCAGCGTGCTGCCC 7319

Sbjct 7241 TCGTGGCGCACTACATGTACTTGATCCCAGGCTGCAGGCAGCAGCTGCGCGTGCTGCCC 7300

Query 7320 AGAAAAGGACAGCAGCTGGCATCATGAAGAATCCCCTTGTGGATGGAATAGTGGTAAGT 7379

Sbjct 7301 AGAAGAGAACGGCAGCTGGCATCATGAAGAACCCTGTTGTGGATGGAATAGTGGTGACTG 7360

Query 7380 ACATTGACACAATGACAATAGACCCCGAGGTGGAGAAGAAGATGGGACAAAGTGTACTCA 7439

Sbjct 7361 ACATTGACACAATGACAATTGACCCCAAGTGGAGAAAAGATGGGACAGGTGCTACTCA 7420

Query 7440 TAGCAGTAGCCATCTCCAGTGCTGTGCTGCTGCGGACCGCTGGGGATGGGGGAGGCTG 7499

Sbjct 7421 TAGCAGTAGCCGTCTCCAGCGCCATACTGTCGCGGACCGCTGGGGTGGGGGAGGCTG 7480

Query 7500 GAGCTCTGATCAGCAGCAGCAGCTCCACCTTGTGGGAAGGCTCTCAAACAATACTGGA 7559

```

Sbjct  7481  GGGCCCTGATCACAGCGGCAACTTCCACTTTGTGGGAAGGCTCTCCGAACAAGTACTGGA 7540
Query   7560  ACTCCTCTACAGCCACCTCACTGTGCAACATCTTCAGAGGAAGCTATCTGGCAGGAGCTT 7619
Sbjct  7541  ACTCCTCTACAGCCACTTCACTGTGTAACATTTTTAGGGGAAGTTACTTGGCTGGAGCTT 7600
Query   7620  CCCTTATCTATACAGTGACGAGAAACGCTGGCTGGTTAAGAGACGTGGAGGTGGGACGG 7679
Sbjct  7601  CTCTAATCTACACAGTAACAAGAAACGCTGGCTTGGTCAAGAGACGTGGGGGTGGAACAG 7660
Query   7680  GAGAGACTCTGGGAGAGAAGTGGAAAGCTCGTCTGAATCAGATGTCGGCCCTGGAGTTCT 7739
Sbjct  7661  GAGAGACCTCTGGGAGAGAAATGGAAGGCCCGCTTGAACCAGATGTCGGCCCTGGAGTTCT 7720
Query   7740  ACTCTTATAAAAAGTCAGGTATCACTGAAGTGTGTAGAGAGGAGGCTCGCCGTGCCCTCA 7799
Sbjct  7721  ACTCTACAAAAAGTCAGGCATCACCAGAGTGTGCAGAGAAGAGGCCCGCCGCGCCCTCA 7780
Query   7800  AGGATGGAGTGGCCACAGGAGGACATGCCGTATCCCGGGGAAGTGCAAAGCTCAGATGGT 7859
Sbjct  7781  AGGACGGTGTGGCAACGGGAGGCCATGCTGTGTCCGAGGAAGTGCAAAGCTGAGATGGT 7840
Query   7860  TGGTGGAGAGAGGATATCTGCAGCCCTATGGGAAGGTTGTTGACCTCGGATGTGGCAGAG 7919
Sbjct  7841  TGGTGGAGCGGGGATACCTGCAGCCCTATGGAAAGGTCATTGATCTTGGATGTGGCAGAG 7900
Query   7920  GGGGCTGGAGCTATTATGCCGCCACCATCCGCAAAGTGCAGGAGGTGAGAGGATACACAA 7979
Sbjct  7901  GGGGCTGGAGTTACTACGCCGCCACCATCCGCAAAGTCAAGAAGTGAAAGGATACACAA 7960
Query   7980  AGGGAGGTCCCGGTGATGAAGAACCACATGCTGGTGCAAAGCTATGGGTGGAACATAGTTC 8039
Sbjct  7961  AAGGAGGCCCTGGTCATGAAGAACCACATGTTGGTGCAAAGCTATGGGTGGAACATAGTCC 8020
Query   8040  GTCTCAAGAGTGGAGTGGACGTCTTCCACATGGCGGCTGAGCCGTGTGACACTCTGCTGT 8099
Sbjct  8021  GTCTTAAGAGTGGGTGGACGTCTTTCATATGGCGGCTGAGCCGTGTGACACGTTGCTGT 8080
Query   8100  GTGACATAGGTGAGTCATCATCTAGTCTTGAAGTGGAGAGACACGAACACTCAGAGTGC 8159
Sbjct  8081  GTGACATAGGTGAGTCATCATCTAGTCTTGAAGTGGAGAAGCACGGACGCTCAGAGTCC 8140
Query   8160  TCTCTATGGTGGGGGACTGGCTTGAAAAAGACCAGGGGCTTCTGTATAAAGGTGCTGT 8219
Sbjct  8141  TCTCCATGGTGGGGGATTGGCTTGAAAAAGACCAGGAGCCTTTGTATAAAGTGTTGT 8200
Query   8220  GCCCATACACCAGCACTATGATGGAACCATGGAGCGACTGCAACGTAGGCATGGGGGAG 8279
Sbjct  8201  GCCCATACACCAGCACTATGATGGAACCATGGAGCGACTGCAGCGTAGGTATGGGGGAG 8260
Query   8280  GATTAGTCAGAGTGCCATTGTCTCGCAACTCCACACATGAGATGTACTGGGTCTCTGGGG 8339
Sbjct  8261  GACTGGTCAGAGTGCCACTCTCCGCAACTCTACACATGAGATGTACTGGGTCTCTGGAG 8320
Query   8340  CAAAGAGCAACATCATAAAAAGTGTGTCCACCACAAGTCAGCTCCTCCTGGGACGCATGG 8399
Sbjct  8321  CGAAAAGCAACACCATAAAAAGTGTGTCCACCACGAGCCAGCTCCTCTTGGGGCGCATGG 8380
Query   8400  ATGGCCCCAGGAGGCCAGTGAAATATGAGGAGGATGTGAACCTCGGCTCGGGTACACGAG 8459
Sbjct  8381  ACGGGCCCAGGAGGCCAGTGAAATATGAGGAGGATGTGAATCTCGGCTCTGGCACGCGGG 8440
Query   8460  CTGTGGCAAGCTGTGCTGAGGCTCTTAACATGAAAATCATCGGCAGGCGCATTGAGAGAA 8519
Sbjct  8441  CTGTGGTAAGCTGCGCTGAAGCTCCAACATGAAGATCATTGGTAACCGCATTGAAAGGA 8500
Query   8520  TCCGCAATGAACATGCAGAAACATGGTTTCTTGATGAAAACCACCCATACAGGACATGGG 8579
Sbjct  8501  TCCGCAATGAACATGCAGAAACATGGTTTCTTGATGAAAACCACCCATACAGGACATGGG 8560
Query   8580  CCTACCATGGGAGCTACGAAGCCCCACGCAAGGATCAGCGTCTTCCCTCGTGAACGGGG 8639
Sbjct  8561  CTTACCATGGAAGCTATGAGGCCCCACACAAGGGTCAGCGTCTCTCTAATAAACGGGG 8620
Query   8640  TTGTTAGACTCCTGTCAAAGCCTTGGGACGTGGTGAAGTTACAGGAATAGCCATGA 8699
Sbjct  8621  TTGTCAGGCTCCTGTCAAACCTTGGGATGTGGTGAAGTTACAGGAATAGCCATGA 8680
Query   8700  CTGACACCACACCATACGGCCAACAAGAGTCTTCAAAGAAAAAGTGGACACCAGGGTGC 8759
Sbjct  8681  CCGACACCACACCGTATGGTCAGCAAAGAGTTTCAAAGAAAAAGTGGACACTAGGGTGC 8740
Query   8760  CAGATCCCCAAGAAGGCACTCGCCAGGTAATGAACATAGTCTCTTCTGGCTGTGGAAGG 8819
Sbjct  8741  CAGACCCCCAAGAAGGCACTCGTCAGGTTATGAGCATGGTCTCTTCTGGTTGTGGAAG 8800
Query   8820  AGCTGGGGAAACGCAAGCGGCCACGCGTCTGCACCAAGAAGAGTTTATCAACAAGGTGC 8879
Sbjct  8801  AGCTAGGCAAAACACAAACGGCCACGAGTCTGTACCAAGAAGAGTTTATCAACAAGGTTC 8860

```

Query	8880	GCAGCAATGCAGCACTGGGAGCAATATTTGAAGAGGAAAAAGAATGGAAGACGGCTGTGG	8939
Sbjct	8861	GTCAGCAATGCAGCATTAGGGGCAATATTTGAAGAGGAAAAAGAGTGGAAAGACTGCAGTGG	8920
Query	8940	AAGCTGTGAATGATCCAAGGTTTTGGGCCCTAGTGGATAGGGAGAGAGAACACCACTGA	8999
Sbjct	8921	AAGCTGTGAACGATCCAAGGTTCTGGGCTCTAGTGGACAAGGAAAGAGAGCACCACTGA	8980
Query	9000	GAGGAGAGTGTACAGCTGTGTGTACAACATGATGGGAAAAAGAGAAAAAGAAGCAAGGAG	9059
Sbjct	8981	GAGGAGAGTGCCAGAGTTGTGTGTACAACATGATGGGAAAAAGAGAAAAAGAAACAAGGGG	9040
Query	9060	AGTTCGGGAAAGCAAAAGGTAGCCGCGCCATCTGGTACATGTGGTTGGGAGCCAGATTCT	9119
Sbjct	9041	AATTTGGAAGGCCAAGGGCAGCCGCGCCATCTGGTATATGTGGCTAGGGGCTAGATTTC	9100
Query	9120	TGGAGTTTGAAGCCCTTGGATTCTTGAACGAGGACCATTGGATGGGAAGAGAAAACTCAG	9179
Sbjct	9101	TAGAGTTTGAAGCCCTTGGATTCTTGAACGAGGATCACTGGATGGGGAGAGAGAACTCAG	9160
Query	9180	GAGGTGGAGTCAAGGGTTAGGATTGCAAGACTTGGATACATTCTAGAAGAAATGAATC	9239
Sbjct	9161	GAGGTGGTGTGAAGGGCTGGGATTACAAGACTCGGATATGTCTAGAAGAGATGAGTC	9220
Query	9240	GGGCACCAAGGAGGAAAGATGTACGCAGATGACACTGCTGGCTGGGACACCCGCATTAGTA	9299
Sbjct	9221	GCATACCAGGAGGAAGGATGTATGCAGATGACACTGCTGGCTGGGACACCCGCATCAGCA	9280
Query	9300	AGTTTGATCTGGAGAATGAAGCTCTGATTACCAACCAAATGGAGGAAGGGCACAGAACTC	9359
Sbjct	9281	GGTTTGATCTGGAGAATGAAGCTCTAATCACCAACCAAATGGAGAAAGGGCACAGGGCCT	9340
Query	9360	TGGCGTTGGCCGTGATTAAATACACATACCAAAACAAAGTGGTGAAGGTTCTCAGACCAG	9419
Sbjct	9341	TGGCATTGGCCATAATCAAGTACACATACCAAAACAAAGTGGTAAAGGTCCTTAGACCAG	9400
Query	9420	CTGAAGGAGGAAAAACAGTTATGGACATCATTTCAAGACAAGACCAGAGAGGGAGTGGAC	9479
Sbjct	9401	CTGAAAAAGGGAAGACAGTTATGGACATATTTTCGAGACAAGACCAAAGGGGGAGCGGAC	9460
Query	9480	AAGTTGTCACTTATGCTCTCAACACATTACCAACTTGGTGGTGCAGCTTATCCGGAACA	9539
Sbjct	9461	AAGTTGTCACTTACGCTCTTAACACATTTACCAACCTAGTGGTGCACCTATTTCGGAATA	9520
Query	9540	TGGAAGCTGAGGAAGTGTAGAGATGCAAGACTTATGGTTGTTGAGGAAGCCAGAGAAAG	9599
Sbjct	9521	TGGAGGCTGAGGAAGTCTAGAGATGCAAGACTTGTGGCTGCTGCGGAGGTACAGAGAAAG	9580
Query	9600	TGACCAGATGGTTGCAGAGCAATGGATGGGATAGACTCAAACGAATGGCGGTTCAGTGGAG	9659
Sbjct	9581	TGACCAACTGGTTGCAGAGCAACGGATGGGATAGGCTCAAACGAATGGCAGTCAGTGGAG	9640
Query	9660	ATGACTGCGTTGTGAAGCCAATCGATGATAGGTTTGCACATGCCCTCAGGTTCTTGAATG	9719
Sbjct	9641	ATGATTGCGTTGTGAAGCCAATTGATGATAGGTTTGCACATGCCCTCAGGTTCTTGAATG	9700
Query	9720	ACATGGGAAAAGTTAGGAAAGACACACAGGAGTGGAAACCCTCGACTGGATGGAGCAATT	9779
Sbjct	9701	ATATGGGAAAAGTTAGGAAAGACACACAAGAGTGGAAACCCTCAACTGGATGGGACAACCT	9760
Query	9780	GGGAAGAAGTCCCGTTTCTGCTCCCACTTCAACAAGCTGTACCTCAAGGATGGGAGAT	9839
Sbjct	9761	GGGAAGAAGTCCCGTTTCTGCTCCCACTTCAACAAGCTCCATCTCAAGGACGGGAGGT	9820
Query	9840	CCATTGTGGTCCCTTGCCGCCACCAAGATGAACTGATTGGCCGAGCTCGCGTCTCACCAG	9899
Sbjct	9821	CCATTGTGGTCCCTTGCCGCCACCAAGATGAACTGATTGGCCGGGCCCGCGTCTCTCCAG	9880
Query	9900	GGGCAGGATGGAGCATCCGGGAGACTGCCTGTCTTGCAAAATCATATGCGCAGATGTGGC	9959
Sbjct	9881	GGGCGGGATGGAGCATCCGGGAGACTGCTTGCTAGCAAAATCATATGCGCAAATGTGGC	9940
Query	9960	AGCTCCTTTATTTCCACAGAAGAGACCTTCGACTGATGGCTAATGCCATTTGCTCGGCTG	10019
Sbjct	9941	AGCTCCTTTATTTCCACAGAAGGGACCTTCGACTGATGGCCAATGCCATTTGTTTCATCTG	10000
Query	10020	TGCCAGTTGACTGGGTACCAACTGGGAGAACCACTGGTCAATCCATGGAAAGGGAGAAT	10079
Sbjct	10001	TGCCAGTTGACTGGGTTCCAACTGGGAGAACTACCTGGTCAATCCATGGAAAGGGAGAAT	10060
Query	10080	GGATGACCACTGAGGACATGCTCATGGTGTGGAATAGAGTGTGGATTGAGGAGAACGACC	10139
Sbjct	10061	GGATGACCACTGAAGACATGCTTGTGGTGTGGAACAGAGTGTGGATTGAGGAGAACGACC	10120
Query	10140	ATATGGAGGACAAGACTCCTGTAACAAAATGGACAGACATTCCTATCTAGGAAAAAGGG	10199
Sbjct	10121	ACATGGAAGACAAGACCCAGTTACGAAATGGACAGACATTCCTATTTGGGAAAAAGGG	10180
Query	10200	AGGACTTATGGTGTGGATCCCTTATAGGGCACAGACCCCGCACCACTTGGGCTGAAAACA	10259
Sbjct	10181	AAGACTTGTGGTGTGGATCTCTATAGGGCACAGACCCCGCACCACTTGGGCTGAGAACA	10240

```

Query  10260  TCAAAGACACAGTCAACATGGTGCGCAGGATCATAGGTGATGAAGAAAAGTACATGGACT 10319
Sbjct  10241  TTAAAAACACAGTCAACATGGTGCGCAGGATCATAGGTGATGAAGAAAAGTACATGGACT 10300

Query  10320  ATCTATCCACCCAAGTCCGCTACTTGGGTGAGGAAGGGTCCACACCCGGAGTGTTGTAAG 10379
Sbjct  10301  ACCTATCCACCCAAGTTCGCTACTTGGGTGAAGAAGGGTCTACACCTGGAGTGCTGTAAG 10360

Query  10380  CACCAATTTTAGTGTTGTCAGGCCTGCTAGTCAGCCACAGTTTGGGGAAAGCTGTGCAGC 10439
Sbjct  10361  CACCAATCTTAGTGTTGTCAGGCCTGCTAGTCAGCCACAGCTTGGGGAAAGCTGTGCAGC 10420

Query  10440  CTGTAACCCCCCAGGAGAAGCTGGGAAACCAAGCTCATAGTCAGGCCGAGAACGCCATG 10499
Sbjct  10421  CTGTGACCCCCCAGGAGAAGCTGGGAAACCAAGCCTATAGTCAGGCCGAGAACGCCATG 10480

Query  10500  GCACGGAAGAAGCCATGCTGCCTGTGAGCCCTCAGAGGACACTGAGTCAAAAAACCCCA 10559
Sbjct  10481  GCACGGAAGAAGCCATGCTGCCTGTGAGCCCTCAGAGGACACTGAGTCAAAAAACCCCA 10540

Query  10560  CGCGCTTGAAGCGCAGGATGGGAAAAGAAGGTGGCGACCTTCCCCACCTTCAATCTGG 10619
Sbjct  10541  CGCGCTTGAAGCGCAGGATGGGAAAAGAAGGTGGCGACCTTCCCCACCTTCAATCTGG 10600

Query  10620  GGCCTGAACTGGAGACTAGCTGTGAATCTCCAGCAGAGGGACTAGTGGTTAGAGGAGACC 10679
Sbjct  10601  GGCCTGAACTGGAGATCAGCTGTGGATCTCCAGAAGAGGGACTAGTGGTTAGAGGAGACC 10660

Query  10680  CCCCAGAAAACGCAAAACAGCATATTGACGCTGGGAAAGACCAGAGACTCCATGAGTTTC 10739
Sbjct  10661  CCCCAGAAAACGCAAAACAGCATATTGACGCTGGGAAAGACCAGAGACTCCATGAGTTTC 10720

Query  10740  CACCACGCTGGCCGCCAGGCACAGATCGCCGAACAGCGGCGCCGGTGTGGGGAAATCCA 10799
Sbjct  10721  CACCACGCTGGCCGCCAGGCACAGATCGCCGAATAGCGGCGCCGGTGTGGGG 10773

Query  10800  TGGTTTCT 10807

```

Taxonomy

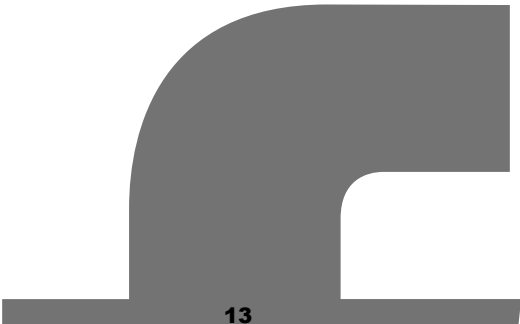
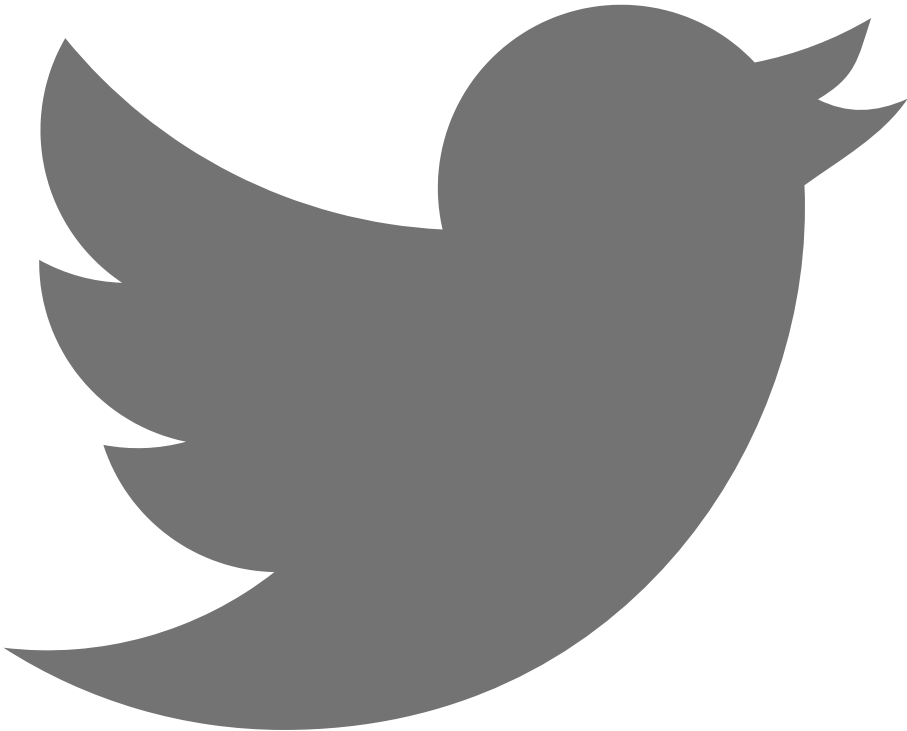
Reports

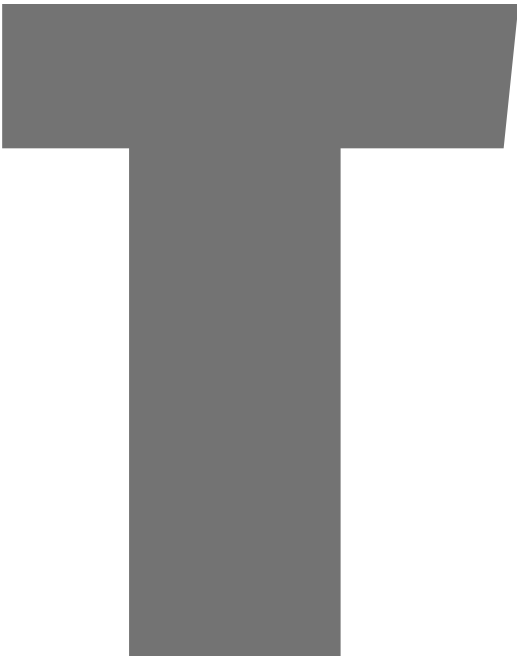
- Lineage
- Organism
- Taxonomy

Dot Plot

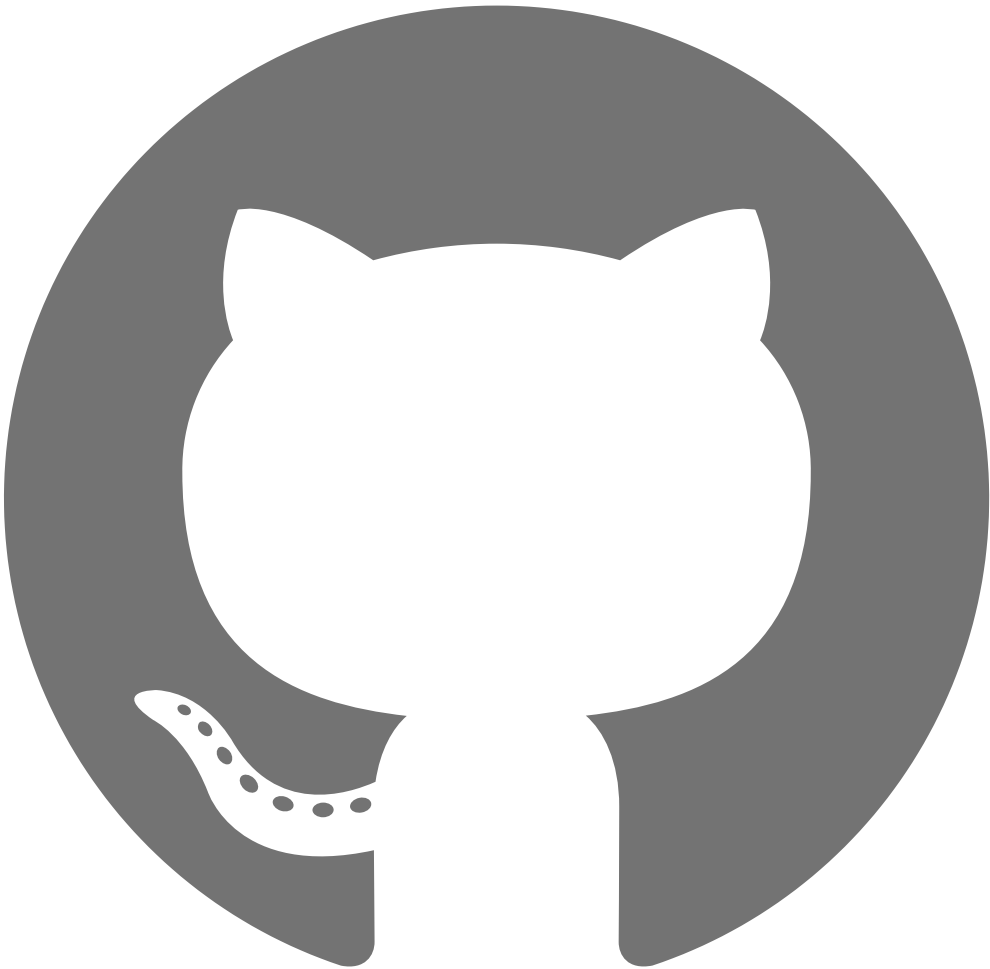
Plot of lcl|Query_20657 vs lcl|Query_20659

Follow NCBI











-
-
-
-