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Published research using this software should cite

Multiple sequence alignment with hierarchical clustering

F. CORPET, 1988, Nucl. Acids Res., 16 (22), 10881-10890

Symbol comparison table: blosum62

Gap weight: 12

Gap length weight: 2

Consensus levels: high=90% low=50%

Consensus symbols:

! is anyone of IV

\$ is anyone of LM

% is anyone of FY

is anyone of NDQEBZ

MSF: 3834 Check: 0 ..

Name: BataAY88866.1[Len: 3834 Check: 3704 Weight: 1.00

Name: QIA98583.1[S=s Len: 3834 Check: 6557 Weight: 1.00

Name: Consensus Len: 3834 Check: 936 Weight: 0.00

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1
BatAAY8886 ATGAAAATTT TAATTTTTGC TTTCTTAGCT AATTTAGCTA AAGCACAGGA AGGATGCGGT ATCATCAGTA GAAAACCGCA ACCTAAAATG GCACAAGTCT CATCTTCTCG TCGGGGCGTT TATTATAATG 130
QIA98583.1 ATGTTTTG TTTTCTTGT TTTATTGCCA CTAGTCTCTA GT---CAGTG TGTTAATCTT ACAACCAGAA CTC AATTACC CCCTGCATA- -CACTAAT-T CTTTCACACG T---GGTGTT TATTACCCTG
Consensus ...AaaaTTg TaaTTcTTGc TTTaTTacCa aaagTagCTA aa...CAGga aGgaaccgt AcaAcCAGaA caaAAccaCa aCCTaaAaa. .CACaAa.T CaTccaCaCG T...GGcGTT TATTaCaTG

131
BatAAY8886 ATGACATTTT CCGTTCTGAT GTGTTACACC TCACACAGGA TTA CTTCTG CCATTTGACT CAAATTTAAC TCAGTACTTT TCGCTTAATG T---GGATTC AGATAGGTAT ACCTATTTTG ACAACCCCAT 260
QIA98583.1 ACAAGTTTTT CAGATCCTCA GTTTTACATT CAACTCAGGA CTTGTTCTTA CCTTTCTTTT CCAATGTTAC TTGGTTCCAT GCTATACATG TCTCTGGGAC CAATGGTACT AAGAGGTTTG ATAACCCCTGT
Consensus AcaAaaTTTT CaGaTCgaa GTgTTACacc caACaCAGGA cTactTCcTa CcATTcgact CaAATgTaAC TcaGTaCcaT gCgaTaaATG T...gGagaC aaATaGgaat AacaagTTTG AcAACCCcaT

261
BatAAY8886 ACTAGACTTT GGTGATGGCG TTTATTTTCG TGCCACTGAA AAGTCTAACG TAATAAGAGG CTGGATTTTT GGTTCATCTT TTGATAACAC CACCCAGTCA GCTGTTATAG TTAATAATTC AACACACATT 390
QIA98583.1 CCTACCATTT AATGATGGTG TTTATTTTCG TTCCACTGAG AAGTCTAACa TAATAAGAGG CTGGATTTTT GGTACTACTT TAGATTCGAA GACCCAGTCC CTACTTATTG TTAATAACGC TACTAATGTT
Consensus aCTAcaaTTT aaTGATGGcG TTTATTTcGc TgCCACTGaa AAGTCTAACa TAATAAGAGG CTGGATTTTT GGTaCaaCTT TaGATAacAa cACCCAGTca ccacTTATag TTAATAAcgc aCaaAcaTT

391
BatAAY8886 ATTATACGTG TGTGTAATTT TAACCTATGT AAAGAACCCA TGTATACTGT TAGTAG--AG GTACACAGCA AAA----- -----TGC- --CTGGTTTT ATCAGAGTGC ATTTAATTGT ACATATGACC 520
QIA98583.1 GTTATTAAG TCTGTGAATT TCAATTTTGT AATGATCCAT TTTTGGGTGT TTATTACCAC AAAACAACA AAAAGTTGGAT GGAAAGTGAG TTCAGAGTTT ATTCTAGTGC GAATAATTGC ACTTTTGAAT
Consensus aTTATAaaag TcTGTaAaTT TaAaTTaTGT AAAGAACCa TgTagacTGT TaaTaa..Ac aaAACAACA AAA..... .....TGA. ..CaGaGTTT ATcagAGTGC aaaTAATTGc ACaTaTGAac

521
BatAAY8886 GAGTGAAAA GAGTTTTCAA CTTGACACTA CTCCTAAAAC TGGAAATTTT AAAGACCTAC GTGAGTATGT CTTTAAAAAT AGGGATGGCT TTCTGTCTGT CTACCAAAC TATACTGCTG TTAATTTACC 650
QIA98583.1 ATGTCCTCA GCCTTTTCTT ATGGACCTTG AAGGAAAAACA GGGTAATTTT AAAAATCTTA GGGAAATTTG GTTTAAGAAAT ATTGATGGTT ATTTTAAAAT ATATTCTAAG CACACGCCTA TTAATTTAGT
Consensus aaGTcgaaaA GacTTTTCAa aTgGACacTa aaccaAAAAa gGgaAATTTc AAAaAcCTaa GgGaTaTGT cTTTAAaAAT AggGATGGcT atcTgaaaaT aTAccaaAag cAcACgcCTa TTAATTTAcc

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	1951		2080
BatAAY8886	GCTGGCTGTC TTATAGGAGC TGAGCATGTC AACGCCTCTT ATGAGTGTGA CATTCTTATT GGTGCAGGCA TTTGTGCTAG TTACCATACA GCTTCTG-TT CT----- ---ACGTAGT ACCGGCCAGA		
QIA98583.1	GCAGGCTGTT TAATAGGGGC TGAACATGTC AACAACTCAT ATGAGTGTGA CATACCCATT GGTGCAGGTA TATGCGCTAG TTATCAGACT CAGACTAATT CTCCTCGGCG GGCACGTAGT GTAGCTAGTC		
Consensus	GCaGGCTGTC TaATAGGaGC TGAaCATGTC AACaaCTCaT ATGAGTGTGA CATaCCcATT GGTGCAGGcA TaTgCGCTAG TTAcCAGAcA cagaCTa.TT CT..... ...ACGTAGT acaGccaaga		
	2081		2210
BatAAY8886	AATCAATTGT TGCCTATACT ATGTCACCTGG GTGCTGAAAA TTCCATTGCA TACGCTAATA ATTC AATTGC CATACTACA AATTTTTCAA TCAGTGTAC TACAGAAAGTG ATGCCTGTTT CAATGGCTAA		
QIA98583.1	AATCCATCAT TGCCTACACT ATGTCACCTGG GTGCGAAGAAA TTCAGTTGCT TACTCTAATA ACTCTATTGC CATAACCACA AATTTTACTA TTAGTGTAC CACAGAAATT CTACCAAGTG CTATGACCAA		
Consensus	AATCaATcaT TGCCTAcACT ATGTCACCTgG GTGCaGAAAA TTCaattGCa TACgCTAATA ActCaATTGC CATAccACA AATTTTAcAa TcAGTGTcAC cACAGAAAtg aTaCCaGtGt CaATGaCcAA		
	2211		2340
BatAAY8886	AACAGCCGTG GATTGTAATA TGTACATCTG CGGTGATTCT TTAGAGTGCA GCAACTTACT ATTGCAGTAT GGAAGCTTTT GCACACAAC CAATCGTGCC CTCACTGGCA TTGCTATAGA ACAGGACAAA		
QIA98583.1	GACATCAGTA GATTGTACAA TGTACATTTG TGTTGATTCA ACTGAATGCA GCAATCTTTT GTTGCAATAT GGCAGTTTTT GTACACAATT AAACCGTGCT TTAAC TGAA TAGCTGTGA ACAAGACAAA		
Consensus	aACAgCaGtA GATTGTACaA TGTACATcTg cGGTGATTcA acaGAaTGCA GCAAccTAcT aTTGCAaTAT GGAAGcTTTT GcACACAACt aAAcCGTGc cTaACTGGaA TaGCTaTaGA ACAaGACAAA		
	2341		2470
BatAAY8886	AACACTCAGG AGGTCTTTGC CCAGGTAA CAAATGTACA AGACACCTGC CATAAAGGAC TTTGGCGGTT TCAATTTTTT ACAAATATTG CCTGACCCTT CAAAGCCAAC GAAGAGATCA TTTATTGAAG		
QIA98583.1	AACACCCAAG AAGTTTTTGC ACAAGTCAA CAAATTTACA AAACACCACC AATTAAAGAT TTTGGTGGTT TTAATTTTTT ACAAATATTA CCAGATCCAT CAAAACCAAG CAAGAGGTCA TTTATTGAAG		
Consensus	AACACcCaAg AaGtCTTTGC aCaAgTcAA CAAATgtACA AaACACCacC aATaAAaGAc TTTGGcGGTT TcAATTTTTT ACAAATATTa CCaGACCAcT CAAAaCCAAC cAAGAGaTCA TTTATTGAAG		
	2471		2600
BatAAY8886	ACTTGCTCTT CAATAAAGTG ACTCTCGCTG ATGCTGGCTT TATGAAACAA TATGGTGACT GCCTAGGTGA TGTTAGTGCT AGAGACCTTA TCTGTGCCA GAAGTTCAAT GGACTTACTG TGCTACCGCC		
QIA98583.1	ATCTACTTTT CAACAAAGTG AACTTGCAAG ATGCTGGCTT CATCAAACAA TATGGTGATT GCCTTGGTGA TATTGCTGCT AGAGACCTCA TTTGTGCACA AAAGTTTAAc GGCCTTACTG TTTTGCCACC		
Consensus	AccTaCTcTT CAACAAAGTG ACActcGcAg ATGCTGGCTT cATCAAACAA TATGGTGAcT GCCTaGGTGA TaTTacTGCT AGAGACCTcA TcTGTGcACA aAAGTTcAAc GGaCTTACTG TgcTaCCaCC		
	2601		2730
BatAAY8886	ACTGCTCACA GATGAGATGG TTGCTGCATA CACAGCTGCG CTAGTTAGTG GACTGCTAC GGCGGGCTGG ACGTTTGGTG CAGGTGcAGC TCTTCAAATA CCATTTGCTA TGCAAATGGC TTATAGGTTT		
QIA98583.1	TTTGCTCACA GATGAAATGA TTGCTCAATA CACTTCTGCA CTGTTAGCGG GTACAATCAC TTCTGGTTGG ACCTTTGGTG CAGGTGCTGC ATTCAAATA CCATTTGCTA TGCAAATGGC TTATAGGTTT		
Consensus	acTGCTCACA GATGAaATGa TTGCTcaATA CACagCTGCa CTagTaacgG GTAcAaccAC ggCgGGcTGG ACcTTTGGTG CAGGTGcAcG acTaCAAATA CCATTTGCTA TGCAAATGGC TTATAGGTTT		
	2731		2860
BatAAY8886	AATGGCATTG GAGTTACTCA AAATGTTCTC TATGAGAACC AAAAGCTGAT AGCCAATCAG TTTAATAGTG CTATAGGCAA AATTCAAGAA TCATTATCAT CTAAGTCAAG TGCCTAGGA AAAGTCAAGG		
QIA98583.1	AATGGTATTG GAGTTACACA GAATGTTCTC TATGAGAACC AAAAATTGAT TGCCAACCAA TTTAATAGTG TTATTGGCAA AATTCAAGAC TCACTTTCTT CCACAGCAAG TGCCTTGA AAAGTCAAG		
Consensus	AATGGcATTG GAGTTAcCaA aAATGTTCTC TATGAGAACC AAAAacTGAT aGCCAAcCAa TTTAATAGTG cTATaGGCAA AATTCAAGaA TcAcTaTcAT CcAcAGCAAG TGCCTaGGA AAAGTgCAAg		
	2861		2990
BatAAY8886	ATGTGGTTAA CAAAATGCA CAAGCTTTA ACACGCTTGT TAAACAACCT AGCTCTAATT TTGGAGCTAT CTCAAGTGTG TTAATGATA TTCTCTCTCG CCTTGATAAA GTTGAGGCAG AAGTTCAAAT		
QIA98583.1	ATGTGGTCAA CAAAATGCA CAAGCTTTAA ACACGCTTGT TAAACAACCT AGCTCCAATT TTGGTGCAAT TTCAAGTGT TTAATGATA TCCTTTCACG TCTTGACAAA GTTGAGGCTG AAGTGCAAAT		
Consensus	ATGTGGTcAA CAAAATGCA CAAGCTcTaa ACACGCTTGT TAAACAACCTc AGCTCcAATT TTGGaGcAAT cTCAAGTGTg TTAATGATA TcCTcTcAcG cCTTGAcAAA GTTGAGGcAg AAGTgCAAAT		
	2991		3120
BatAAY8886	TGACAGGTTG ATTACAGGCA GATTGCAAAG CCTTCAAACC TACGTAACAC AACAACTTAT CAGAGCTGCT GAAATCAGAG CTTCTGCTAA TCTTGTGCT ACTAAAATGT CTGAGTGCGT TCTTGGACAA		
QIA98583.1	TGATAGGTTG ATCACAGGCA GACTTCAAAG TTTGCAGACA TATGTGACTC AACAAATTAAT TAGAGCTGCA GAAATCAGAG CTTCTGCTAA TCTTGTGCT ACTAAAATGT CAGAGTGTGT ACTTGGACAA		
Consensus	TGAcAGGTTG ATcACAGGCA GAcTgCAAAG ccTgCaAaCa TAcGTAACaC AACAAcTaAT cAGAGCTGCa GAAATCAGAG CTTCTGCTAA TCTTGTGCT ACTAAAATGT CaGAGTgCGT aCTTGGACAA		
	3121		3250
BatAAY8886	TCAAAAAGAG TTGATTTCTG TGGAAAAGGC TACCACCTTA TGTCTTCCC TCAATCAGCA CCTCACGGTG TCGTTTTCT ACATGTCACA TATGTGCCAT CACAAGAGAA AAAGTTCACA ACAGCTCCAG		
QIA98583.1	TCAAAAAGAG TTGATTTTGG TGGAAAAGGC TATCATCTTA TGTCTTCCC TCAGTCAGCA CCTCATGGTG TAGTCTTCTT GCATGTGACT TATGTCCCTG CACAAGAAA GAAGTTCACA ACTGCTCCTG		
Consensus	TCAAAAAGAG TTGATTTcTG TGGAAAaGGC TAcCAcCTTA TGTCTTCCC TCAaTCAGCA CCTCAcGGTG TaGTcTTcct aCATGTcAcA TATGTcCCag CACAAGAAaA aAACTTCACA ACaGCTCCaG		

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3251
BatAAY8886 CTATTTGTCA CGAAGGCAAA GCTTATTTCC CTCGTGAAGG TGTCTTTGTG TCTAATGGCA CTTCTTGTT TATTACGAG AGGAATTTTT ACTCTCACA ATTAATTACA ACAGATAATA CTTTTGTTTC
QIA98583.1 CCATTTGTCA TGATGGAAAA GCACACTTTC CTCGTGAAGG TGTCTTTGTT TCAATGGCA CACTTGTT TGAACACAA AGGAATTTTT ATGAACCACA AATCATTACT ACAGACAACA CATTGTGTC
Consensus CcATTTGTCA cGAaGgAaAA GCacAcTtCc CTCGTGAAGG TGTCTTTGTg TCaAATGGCA CacacTGTT TaTaACaCaA AGGAATTTTT AcgaaCCACA AaTaATTACA ACAGAcAAcA CaTTTGTgTC

3381
BatAAY8886 TGGTAATTGT GATGTCGTGA TCGGCATCAT TAATAACT GTTTATGATC CTCTGCAGCC TGAAC TTGAC TCGTTTAAGG AAGAGCTGGA CAAGTACTTC AAAAATCATA CATCACCAGA TGTGATCTT
QIA98583.1 TGGTAACTGT GATGTTGTAA TAGGAATTGT CAACAACACA GTTTATGATC CTTTGCAACC TGAATTAGAC TCATTCAAGG AGGAGTTAGA TAAATATTTT AAGAATCATA CATCACCAGA TGTGATTTA
Consensus TGGTAAcTGT GATGTcGTaA TaGgAATcaT cAAcAAcAcA GTTTATGATC CTcTGCAACC TGAAcTaGAC TCaTtcAAGG AaGAGcTaGA cAAaTAcTtC AAAaATCATA CATCACCAGA TGTGATcTa

3511
BatAAY8886 GGCACATTT CAGGCATTAA TGCTTCAGTC GTC AACATTC AAAAGGAGAT TGACCGACTC AATGAGGTTG CCAAAAACCT AAATGAATCA CTCATTGACC TCCAAGAACT TGGGAAATAT GAGCAATACA
QIA98583.1 GGTGACATCT CTGGCATTAA TGCTTCAGTT GTAAACATTC AAAAAGAAAT TGACCGCCTC AATGAGGTTG CCAAGAA TTT AAATGAATCT CTCATCGATC TCCAAGAACT TGGAAAGTAT GAGCAGTATA
Consensus GGCgACATcT CaGGCATTAA TGCTTCAGTc GTaAACATTC AAAAaGAaAT TGACCGaCTC AATGAGGTTG CCAAAaAcCT AAATGAATCa CTCATcGAcC TCCAAGAACT TGGaAAaTAT GAGCAaTAcA

3641
BatAAY8886 TCAAGTGGCC TTGGTATGTT TGGCTCGGCT TTATTGCTGG ACTAATTGCC ATCGTCATGG TTACAATCTT GCTTTGTGTC ATGACCAGCT GTTGCAAGTTG TCTCAAGGGT GCATGCTCTT GTGGTTCGTG
QIA98583.1 TAAAATGGCC ATGGTACATT TGGCTAGGTT TTATAGCTGG CTTGATTGCC ATAGTAATGG TGACAATTAT GCTTTGCTGT ATGACCAGTT GCTGTAGTTG TCTCAAGGGC TGTGTTCTT GTGGATCCTG
Consensus TaAAaTGGCC aTGGTAcAtT TGGCTaGGcT TTATaGCTGG acTaATTGCC ATaGTaATGG TgACAATcaT GCTTTGcTgC ATGACCAGcT GcTgCAGTTG TCTCAAGGGc gcaTgCtCTT GTGGaTcCTG

3771
BatAAY8886 CTGCAAATTT GATGAGGACG ACTCTGAGCC AGTGCTCAAA GGAGTCAAAT TACATTACAC ATAA
QIA98583.1 CTGCAAATTT GATGAAGACG ACTCTGAGCC AGTGCTCAAA GGAGTCAAAT TACATTACAC ATAA
Consensus CTGCAAATTT GATGAaGACG ACTCTGAGCC AGTGCTCAAA GGAGTCAAAT TACATTACAC ATAA

3834

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