

CLUSTAL W(1.4) multiple sequence alignment

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atr97140      TCGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
atr97147      -CGATACCTGCACAGGACAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
glb97137      TCGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
glb97139      TCGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
glb97141      TCGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
rubr97121     TCGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
rubr97148     -CGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
sang97123     TCGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
sang97138     TCGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
sang97156     -CGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
sang97163     TCGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
sang97164     TCGATACCTGCACAGG-CAGACCGCGAACTCGTTTTTAATACTGGGCTCGTTGTGTGGG
Hvcap97129    TCGATTCTGCATAGG-CAGACTGCGAACTTGTTTTTAATACATGGGGCAGCTTGTGTGGG
Hvsqua9712    TCGATACCTACACAGG-CAGACCGTGAACCTCGTTTTTCATACATGGGGCTCGTTGTGTGGG
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atr97140      G-TAACTCCTCAGCGTG---CTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
atr97147      G-TAACTCCTCAGCGTG---CTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
glb97137      GGTAACTCCTCAGCGTGTGCTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
glb97139      GGTAACTCCTCAGCGTGTGCTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
glb97141      GGTAACTCCTCAGCGTGTGCTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
rubr97121     GGTAACTCCTCAGCGTGTGCTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
rubr97148     GGTAACTCCTCAGCGTGTGCTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
sang97123     G-TAACTCCTCAGCGTG---CTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
sang97138     G-TAACTCCTCAGCGTG---CTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
sang97156     G-TAACTCCTCAGCGTG---CTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
sang97163     G-TAACTCCTCAGCGTG---CTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
sang97164     G-TAACTCCTCAGCGTG---CTCTCTTGCATGGGCAATGCTCACTGCGGGCAAACAAACC
Hvcap97129    G-TAACTGCACAGCGTGTCTCTCTCGCGTGGGCAATGCTTACTGCGGGCAAACAAACC
Hvsqua9712    G-TAACTGCACAGCGTGTCTCTCTCGCGTGGGCAATGCTCACTGCGGGCAAACAAACC
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atr97140      CCGGCGCGGAATGCGCCAAGGAAAACTAATATGAGCGTCCGCCCCTATCGCCCCGTTTGC
atr97147      CCGGCGCGGAATGCGCCAAGGAAAACTAATATGAGCGTCCGCCCCTATCGCCCCGTTTGC
glb97137      CCGGCGCGGAATGCGCCAAGGAAAACTATTGTGAGCGTCCGCCCCTATCGCCCCGTTTGC
glb97139      CCGGCGCGGAATGCGCCAAGGAAAACTATTGTGAGCGTCCGCCCCTATCGCCCCGTTTGC
glb97141      CCGGCGCGGAATGCGCCAAGGAAAACTATTGTGAGCGTCCGCCCCTATCGCCCCGTTTGC
rubr97121     CCGGCGCGGAATGCGCCAAGGAAAACTATTGTGAGCGTCCGCCCCTATCGCCCCGTTTGC
rubr97148     CCGGCGCGGAATGCGCCAAGGAAAACTATTGTGAGCGTCCGCCCCTATCGCCCCGTTTGC
sang97123     CCGGCGCGGAATGCGCCAAGGAAAACTAATATGAGCGTCCGCCCCTATCGCCCCGTTTGC
sang97138     CCGGCGCGGAATGCGCCAAGGAAAACTAATATGAGCGTCCGCCCCTATCGCCCCGTTTGC
sang97156     CCGGCGCGGAATGCGCCAAGGAAAACTAATATGAGCGTCCGCCCCTATCGCCCCGTTTGC
sang97163     CCGGCGCGGAATGCGCCAAGGAAAACTAATATGAGCGTCCGCCCCTATCGCCCCGTTTGC
sang97164     CCGGCGCGGAATGCGCCAAGGAAAACTAATATGAGCGTCCGCCCCTATCGCCCCGTTTGC
Hvcap97129    CCGGCGCAAAGTGTGCCAAGGAAAACTAAAAGGAGCGTTCGCCCCTATCGCCCCGTTTGC
Hvsqua9712    CCGGCGCAAAGTGTGCCAAGGAAAACTAAAAGGAACGTTTCGCCCCTATCGCCCCGTTTGT
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atr97140 GGC GTGCGAGGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
atr97147 GGC GTGCGAGGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
glb97137 GGTGTGCGACGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
glb97139 GGT-TGCGACGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
glb97141 GGTGTGCGGGGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
rubr97121 GGTGTGCGGGGGGGGG-AGAAGGATGTTCCCTCGAATGTCTAAATGACTTCTCGGCAACGG
rubr97148 GGTGTGCGGGGGGGGGGAGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
sang97123 GGC GTGCGAGGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
sang97138 GGC GTGCGAGGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
sang97156 GGC GTGCGAGGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
sang97163 GGC GTGCGAGGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
sang97164 GGC GTGCGAGGGGGG--AGAAGGATGTTCCCTCGAATGTCTAAATGACT-CTCGGCAACGG
Hvcap97129 AGGGT GCGAGGGGGG--CAAAGGATGTGCCTTGAATGTCTAAATGACT-CTCGACAATGG
Hvsqua9712 AGGGTTGCGATTGGGG--CAAAGGATGTGCCTTGAATGTCTAAATGACT-CTCGACAACGG
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atr97140 ATATCTCGGCTCTCACAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
atr97147 ATATCTCGGCTCTCACAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
glb97137 ATATCTCGGCTCTCGCAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
glb97139 ATATCTCGGCTCTCGCAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
glb97141 ATATCTCGGCTCTCGCAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
rubr97121 ATAT-TCGGCTCTCGCAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
rubr97148 ATATCTCGGCTCTCGCAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
sang97123 ATATCTCGGCTCTCACAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
sang97138 ATATCTCGGCTCTCACAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
sang97156 ATATCTCGGCTCTCACAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
sang97163 ATATCTCGGCTCTCACAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
sang97164 ATATCTCGGCTCTCACAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
Hvcap97129 ATATCTCGGCTCTCGCAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC
Hvsqua9712 ATATCTCGGCTCTCGCAACGATGAAGAACGTAGCGAAATGCGATACTTGGTGTGAATTGC

atr97140 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
atr97147 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
glb97137 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
glb97139 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
glb97141 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
rubr97121 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
rubr97148 AGAATCCC GT-AACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
sang97123 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
sang97138 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
sang97156 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
sang97163 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
sang97164 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCCGAAGCCTCCTGGTTGAG
Hvcap97129 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCTGAAGCCTCCTGGCTGAG
Hvsqua9712 AGAATCCC GTGAACCATCGAGTCTTTGAACGCAAGTTGCGCCTGAAGCCTCCCGCCGAG
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