

CLUSTAL FORMAT: MUSCLE (3.8) multiple sequence alignment

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QIM47476.1      MFVFLVLLPLVSSQCVNLTTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFS
QOJ75919.1      MFVFLVLLPLISSQCVNLTTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFS
QMX86941.1      MFVFLVLLPLVSSQCVNLTTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFS
QMX86953.1      MFVFLVLLPLVSSQCVNLTTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFS
QIM47467.2      MFVFLVLLPLVSSQCVNLTTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFS
*****:*****

QIM47476.1      NVTWFHAIHVSGTNGTKRFDNPVLPFNDGVYFASTEKSNIIRGWIFGTTLDSTQSLIIV
QOJ75919.1      NVTWFHAIHVSGTNGTKRFDNPVLPFNDGVYFASTEKSNIIRGWIFGTTLDSTQSLIIV
QMX86941.1      NVTWFHAIHVSGTNGTKRFDNPVLPFNDGVYFASTEKSNIIRGWIFGTTLDSTQSLIIV
QMX86953.1      NVTWFHAIHVSGTNGTKRFDNPVLPFNDGVYFASTEKSNIIRGWIFGTTLDSTQSLIIV
QIM47467.2      NVTWFHAIHVSGTNGTKRFDNPVLPFNDGVYFASTEKSNIIRGWIFGTTLDSTQSLIIV
*****

QIM47476.1      NNATNVVIKVCFEQFCNDPFLGVYYHKNNKSWMESEFRVYSSANNCTFEYVSQPFLMDLE
QOJ75919.1      NNATNVVIKVCFEQFCNDPFLGVYYHKNNKSWMESEFRVYSSANNCTFEYVSQPFFMDPE
QMX86941.1      NNATNVVIKVCFEQFCNDPFLGVYYHKNNKSWMESEFRVYSSANNCTFEYVSQPFLMDLE
QMX86953.1      NNATNVVIKVCFEQFCNDPFLGVYYHKNNKSWMESEFRVYSSANNCTFEYVSQPFLMDLE
QIM47467.2      NNATNVVIKVCFEQFCNDPFLGVYYHKNNKSWMESEFRVYSSANNCTFEYVSQPFLMDLE
*****:***

QIM47476.1      GKQGNFKNLREFVFKNIDGYFKIYSKHTPINLVRDLPQGFSALEPLVDLPIGINITRFQT
QOJ75919.1      GKQGNFKNLREFVFKNIDGYFKIYSKHTPINLVRDLPQGFSALEPLVDLPIGINITRFQT
QMX86941.1      GKQGNFKNLREFVFKNIDGYFKIYSKHTPINLVRDLPQGFSALEPLVDLPIGINITRFQT
QMX86953.1      GKQGNFKNLREFVFKNIDGYFKIYSKHTPINLVRDLPQGFSALEPLVDLPIGINITRFQT
QIM47467.2      GKQGNFKNLREFVFKNIDGYFKIYSKHTPINLVRDLPQGFSALEPLVDLPIGINITRFQT
*****

QIM47476.1      LLALHRSYLTPGDSXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
QOJ75919.1      LLALHRSYLTPGDSSSGWTAGTAAYYVGYLQPRTFLLKYNENGTITDAVDCALDPLSETK
QMX86941.1      LLALHRSYLTPGDSSSGWTAGAAAYYVGYLQPRTFLLKYNENGTITDAVDCALDPLSETK
QMX86953.1      LLALHRSYLTPGDSSSGWTAGAAAYYVGYLQPRTFLLKYNENGTITDAVDCALDPLSETK
QIM47467.2      LLALHRSYLTPGDSSSGWTAGAAAYYVGYLQPRTFLLKYNENGTITDAVDCALDPLSETK
*****

QIM47476.1      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXRFPNITNLCPFGEVFNATRFASVYAWNKRKISN
QOJ75919.1      CTLKSFTVEKGIYQTSNFRVQPTESIVRFPNITNLCPFGEVFNATRFASVYAWNKRKISN
QMX86941.1      CTLKSFTVEKGIYQTSNFRVQPTESIVRFPNITNLCPFGEVFNATRFASVYAWNKRKISN
QMX86953.1      CTLKSFTVEKGIYQTSNFRVQPTESIVRFPNITNLCPFGEVFNATRFASVYAWNKRKISN
QIM47467.2      CTLKSFTVEKGIYQTSNFRVQPTESIVRFPNITNLCPFGEVFNATRFASVYAWNKRKISN
*****

QIM47476.1      CVADYSVLYNSASFSTFKCYGVSPTKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIAD
QOJ75919.1      CVADYSVLYNSASFSTFKCYGVSPTKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIAD
QMX86941.1      CVADYSVLYNSASFSTFKCYGVSPTKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIAD
QMX86953.1      CVADYSVLYNSASFSTFKCYGVSPTKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIAD
QIM47467.2      CVADYSVLYNSASFSTFKCYGVSPTKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIAD
*****

QIM47476.1      YNYKLPDDFTGCVIAWNSNNLDSKVGGNYNLYRLFRKSNLKPFFERDISTEIQAGSTPC
QOJ75919.1      YNYKLPDDFTGCVIAWNSNNLDSKVGGNYNLYRLFRKSNLKPFFERDISTEIQAGSTPC
QMX86941.1      YNYKLPDDFTGCVIAWNSNNLDSKVGGNYNLYRLFRKSNLKPFFERDISTEIQAGSTPC
QMX86953.1      YNYKLPDDFTGCVIAWNSNNLDSKVGGNYNLYRLFRKSNLKPFFERDISTEIQAGSTPC
QIM47467.2      YNYKLPDDFTGCVIAWNSNNLDSKVGGNYNLYRLFRKSNLKPFFERDISTEIQAGSTPC

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QIM47476.1	NGVEGFNCYFPLQSYGFQPTNGVGYPYRVVLSFELLHAPATVCGPKKSTNLVKNKCVN
QOJ75919.1	NGVEGFNCYFPLQSYGFYTTNGVGYPYRVVLSFELLHAPATVCGPKKSTNLVKNKCVN
QMX86941.1	NGVEGFNCYFPLQSYGFQPTNGVGYPYRVVLSFELLHAPATVCGPKKSTNLVKNKCVN
QMX86953.1	NGVEGFNCYFPLQSYGFQPTNGVGYPYRVVLSFELLHAPATVCGPKKSTNLVKNKCVN
QIM47467.2	NGVEGFNCYFPLQSYGFQPTNGVGYPYRVVLSFELLHAPATVCGPKKSTNLVKNKCVN
	***** . *****
QIM47476.1	FNFNGLTGTGVLTESNKKFLPFQQFGRDIADTTDAVRDPQTLEILDITPCSFGGVSVITP
QOJ75919.1	FNFNGLTGTGVLTESNKKFLPFQQFGRDIADTTDAVRDPQTLEILDITPCSFGGVSVITP
QMX86941.1	FNFNGLTGTGVLTESNKKFLPFQQFGRDIADTTDAVRDPQTLEILDITPCSFGGVSVITP
QMX86953.1	FNFNGLTGTGVLTESNKKFLPFQQFGRDIADTTDAVRDPQTLEILDITPCSFGGVSVITP
QIM47467.2	FNFNGLTGTGVLTESNKKFLPFQQFGRDIADTTDAVRDPQTLEILDITPCSFGGVSVITP

QIM47476.1	GTNTSNQVAVLYQGVNCTEVPVAIHADQLTPTWRVYSTGSNVFQTRAGCLIGAEHVNNYSY
QOJ75919.1	GTNTSNQVAVLYQDVNCTEVPVAIHADQLTPTWRVYSTGSNVFQTRAGCLIGAEHVNNYSY
QMX86941.1	GTNTSNQVAVLYQGVNCTEVPVAIHADQLTPTWRVYSTGSNVFQTRAGCLIGAEHVNNYSY
QMX86953.1	GTNTSNQVAVLYQGVNCTEVPVAIHADQLTPTWRVYSTGSNVFQTRAGCLIGAEHVNNYSY
QIM47467.2	GTNTSNQVAVLYQDVNCTEVPVAIHADQLTPTWRVYSTGSNVFQTRAGCLIGAEHVNNYSY
	***** . *****
QIM47476.1	ECDIPIGAGICASYQTQTNSPRRARSVASQSIIAYTMSLGAENSVAYSNNISIAIPTNFTI
QOJ75919.1	ECDIPIGAGICASYQTQTNSPRRARSVASQSIIAYTMSLGAENSVAYSNNISIAIPNFTI
QMX86941.1	ECDIPIGAGICASYQTQTNSPRRARSVASQSIIAYTMSLGAENSVAYSNNISIAIPTNFTI
QMX86953.1	ECDIPIGAGICASYQTQTNSPRRARSVASQSIIAYTMSLGAENSVAYSNNISIAIPTNFTI
QIM47467.2	ECDIPIGAGICASYQTQTNSPRRARSVASQSIIAYTMSLGAENSVAYSNNISIAIPTNFTI
	***** . *****
QIM47476.1	SVTTEILPVSMTKTSVDCTMYICGDSTEC SNLLLQYGSFCTQLNRALTGIAVEQDKNTQE
QOJ75919.1	SVTTEFLPVSMTKTSVDCTMYICGDSTEC SNLLLQYGSFCTQLNRALTGIAVEQDKNTQE
QMX86941.1	SVTTEILPVSMTKTSVDCTMYICGDSTEC SNLLLQYGSFCTQLNRALTGIAVEQDKNTQE
QMX86953.1	SVTTEILPVSMTKTSVDCTMYICGDSTEC SNLLLQYGSFCTQLNRALTGIAVEQDKNTQE
QIM47467.2	SVTTEILPVSMTKTSVDCTMYICGDSTEC SNLLLQYGSFCTQLNRALTGIAVEQDKNTQE
	***** . *****
QIM47476.1	VFAQVKQIYKTPPIKDFGGFNFSQILPDPSKPSKRSFIEDLLFNKVTLADAGFIKQYGDC
QOJ75919.1	VFAQVKQIYKTPPIKDFGGFNFSQILPDPSKPSKRSFIEDLLFNKVTLADAGFIKQYGDC
QMX86941.1	VFAQVKQIYKTPPIKDFGGFNFSQILPDPSKPSKRSFIEDLLFNKVTLADAGFIKQYGDC
QMX86953.1	VFAQVKQIYKTPPIKDFGGFNFSQILPDPSKPSKRSFIEDLLFNKVTLADAGFIKQYGDC
QIM47467.2	VFAQVKQIYKTPPIKDFGGFNFSQILPDPSKPSKRSFIEDLLFNKVTLADAGFIKQYGDC

QIM47476.1	LGDI AARDLICAQKFNGLTVLPPLLTDEMIAQYTSALLAGTITSGWTFGAGAALQIPFAM
QOJ75919.1	LGDI AARDLICAQKFNGLTVLPPLLTDEMIAQYTSALLAGTITSGWTFGAGAALQIPFAM
QMX86941.1	LGDI AARDLICAQKFNGLTVLPPLLTDEMIAQYTSALLAGTITSGWTFGAGAALQIPFAM
QMX86953.1	LGDI AARDLICAQKFNGLTVLPPLLTDEMIAQYTSALLAGTITSGWTFGAGAALQIPFAM
QIM47467.2	LGDI AARDLICAQKFNGLTVLPPLLTDEMIAQYTSALLAGTITSGWTFGAGAALQIPFAM

QIM47476.1	QMAYRFNGIGVTONVLYENQKLIANQFN SAIGKIQDSL SSTASALGKLQDVVNQNAQALN
QOJ75919.1	QMAYRFNGIGVTONVLYENQKLIANQFN SAIGKIQDSL SSTASALGKLQDVVNQNAQALN
QMX86941.1	QMAYRFNGIGVTONVLYENQKLIANQFN SAIGKIQDSL SSTASALGKLQDVVNQNAQALN
QMX86953.1	QMAYRFNGIGVTONVLYENQKLIANQFN SAIGKIQDSL SSTASALGKLQDVVNQNAQALN
QIM47467.2	QMAYRFNGIGVTONVLYENQKLIANQFN SAIGKIQDSL SSTASALGKLQDVVNQNAQALN

QIM47476.1 TLVKQLSSNFGAISSVLNDILSRDKVEAEVQIDRLITGRLQSLQTYVTQQLIRAAEIRA
QOJ75919.1 TLVKQLSSNFGAISSVLNDILSRDKVEAEVQIDRLITGRLQSLQTYVTQQLIRAAEIRA
QMX86941.1 TLVKQLSSNFGAISSVLNDILSRDKVEAEVQIDRLITGRLQSLQTYVTQQLIRAAEIRA
QMX86953.1 TLVKQLSSNFGAISSVLNDILSRDKVEAEVQIDRLITGRLQSLQTYVTQQLIRAAEIRA
QIM47467.2 TLVKQLSSNFGAISSVLNDILSRDKVEAEVQIDRLITGRLQSLQTYVTQQLIRAAEIRA

QIM47476.1 SANLAATKMSECVLGQSKRVDFCGKGYHLMSFPQSAPHGVVFLHVTYVPAQEKNFTTAPA
QOJ75919.1 SANLAATKMSECVLGQSKRVDFCGKGYHLMSFPQSAPHGVVFLHVTYVPAQEKNFTTAPA
QMX86941.1 SANLAATKMSECVLGQSKRVDFCGKGYHLMSFPQSAPHGVVFLHVTYVPAQEKNFTTAPA
QMX86953.1 SANLAATKMSECVLGQSKRVDFCGKGYHLMSFPQSAPHGVVFLHVTYVPAQEKNFTTAPA
QIM47467.2 SANLAATKMSECVLGQSKRVDFCGKGYHLMSFPQSAPHGVVFLHVTYVPAQEKNFTTAPA

QIM47476.1 ICHDGKAHFPREGVFVSNNGTHWFVTQRNFYEPQIITTDNTFVSGNCDVVIGIVNNTVYDP
QOJ75919.1 ICHDGKAHFPREGVFVSNNGTHWFVTQRNFYEPQIITTDNTFVSGNCDVVIGIVNNTVYDP
QMX86941.1 ICHDGKAHFPREGVFVSNNGTHWFVTQRNFYEPQIITTDNTFVSGNCDVVIGIVNNTVYDP
QMX86953.1 ICHDGKAHFPREGVFVSNNGTHWFVTQRNFYEPQIITTDNTFVSGNCDVVIGIVNNTVYDP
QIM47467.2 ICHDGKAHFPREGVFVSNNGTHWFVTQRNFYEPQIITTDNTFVSGNCDVVIGIVNNTVYDP

QIM47476.1 LQPELDSFKEELDKYFKNHTSPDVLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDL
QOJ75919.1 LQPELDSFKEELDKYFKNHTSPDVLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDL
QMX86941.1 LQPELDSFKEELDKYFKNHTSPDVLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDL
QMX86953.1 LQPELDSFKEELDKYFKNHTSPDVLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDL
QIM47467.2 LQPELDSFKEELDKYFKNHTSPDVLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDL

QIM47476.1 QELGKYEQYIKWPWYIWLGFIAGLIAIVMVTIMLCCMTSCCSCLKGCCSCGSCCKFDEDD
QOJ75919.1 QELGKYEQYIKWPWYIWLGFIAGLIAIVMVTIMLCCMTSCCSCLKGCCSCGSCCKFDEDD
QMX86941.1 QELGKYEQYIKWPWYIWLGFIAGLIAIVMVTIMLCCMTSCCSCLKGCCSCGSCCKFDEDD
QMX86953.1 QELGKYEQYIKWPWYIWLGFIAGLIAIVMVTIMLCCMTSCCSCLKGCCSCGSCCKFDEDD
QIM47467.2 QELGKYEQYIKWPWYIWLGFIAGLIAIVMVTIMLCCMTSCCSCLKGCCSCGSCCKFDEDD

QIM47476.1 SEPVLKGVKLHYT
QOJ75919.1 SEPVLKGVKLHYT
QMX86941.1 SEPVLKGVKLHYT
QMX86953.1 SEPVLKGVKLHYT
QIM47467.2 SEPVLKGVKLHYT
