

Identification and Characterization of C-Mos in Pearl Mussel *Hyriopsis cumingii* and Its Role in Gonadal Development

Supplementary Table S1. List of amino acid sequences used for multiple alignment analysis and NJ phylogenetic tree of C-Mos protein in *H. cumingii*.

Accession Numbers	Species	Amino acid sequences
XP_052244251.1	Dreissena polymorpha	MLERQSSRGNLHRQSTLRNINKHSCLQRQKSRHTLQRQHNSN VVLQAKISDVNNNNINVNSVLSVTHVSPRVRHLLLKHTKFGFI DRFQNLSLAGSSADIKSTESLPSILTESDTLIRDCQMPESLFRD DFTASKTINKDDFELGRVLGAGGFGSVYLGFQKQKVAIKV MHKYTKNPAAQIESFKAELHVMRFNHPNIVRTLAATHIDKF DEGAWIIMEYVGFSNLYKLLSDSEEVIANERRLKFAIQIASAL AYAHKHKVAHLDLKPANILITDDDNCVKVGDGFCSSQKVEID TGVVSPTNRSILTGTFAYRAPELLRGEPPTFKADVYSFGITLW QLKSRETPFCNQNHVVFVAVVANGMRPPDMSPAETDPFEL SYKDLYAQCWATANPLDRPSASEVVDVLNIWKLHL
XP_021343629.1	Mizuhopecten yessoensis	MVMVKVREETHSFNHGHQHTPVHGHHRHVHHHHGHNSPV HTLKSLSFGKYRHLRCSSPKLCLSTPKSKRLSESKRNCLGGEIR RPFLINKKGGEDNDSVFIKEDFKLGKLLGAGGFGSVYMANG KSGHGSMIAIKVLKKPTMSKNPDAMFESFKAELRCMQLSHP NVVQSLGATHMTSFEEGAWVVMYVVGERTLQAVLNESEQV DITIELRLKFAIQIAQGLKYLHDNSIVHLDIKPANILITPDGDC KIGDLGCSQILEEGTGRVSPTQRSSLTGTFAYRAPELLRGDAP TRKADIYSFGITMWQMLARDNPNYGNENQHVVIFGVVAYGH RPKHPNMSEQNPFELCYRDLYSQCWSTPQNRPSADELVEV LDIWKNQL
XP_050403259.1	Patella vulgata	MPADVKNKVSEILMVSESCFVLDDFEVLPQTPFEDLASRFLNK DDYDLGKLLGAGGFGSVYLASYKNKITAVKTLHKVTKNPK AQMESYKAELNVYNWKHPNIVRTVAATSIEQYDTGAWIVM EYIGSRNLQMLINDTEEELDQQRRLKYSLEVASALEFTHSNHI VHLDLKPANILLTERDSCKLGDFGCCQRVEDTGRVSPTNRS ALTGTFAIRAPPELLRGGAPTLVADVYSYGVTLWQLLSRETPY SNQNQHVVIFSVVSKHLRPPHPDVGDPPFELLYQELYTQCW SANPETRPTSRLVELLKLWKYYM
XP_011422084.2	Crassostrea gigas	MKIASYIQSHQMTKTSFTTRSWQKLKHLISKYKRSRGVIRKV MPKISFANNKKLKLVSDDVKLGRLLGAGGFGSVYYGSYRQ RDVAVKIMHKQSKNPEAQIESFKAELHVLDFEHPNIVKTLA ATPFEEFKEGAWIVMEYAGSRTLQSMINNEELCQETRIRFAI QMSDALHYIHDNHVHLDLKPANILITARGDVKMADFGCS QKVELDTGLVSPTQRSLTGTFAYRAPELLKGQVPSNKADIY ALGVTLWQMLARENPNYGNENQHVVIFSVVAYGHRPPHPEI DLDPFEECYRDLYTQCWSATQFDRPSAKELHETLKIWKHM

CAC5414491.1	<i>Mytilus coruscus</i>	MQIKNEHNLCVVKGKKYSLSSLKGINQCQHILRKYKLFRK KLGQFAKRIVMPVLAQNENQRDEFKRPHAIVCTRHRNASFR KEEVVLGRLLGTGGFGSVYRGKYKDSTVAVKVMHRVTKNP AAQLESFKAELNTIGFDHENIVKTITATSLETFDQGAWIVME YAGRRTLQSLVDDDSVSLGPRRRVKFSQQIAEALKYAHDMDK IVHLDLKPANILITPGGRCKVADFGCSQKVEIDTGIFSPTQRSI LTGTFAYRAPELLKGEAPSKKADIYALAVIMWQLLSRQTPFS NENQHVVIFGVVAYGQRPKHPEIEVDPFEESYRDLYSQCWL PCPLDRPTAGEIAELLNIWRGYM
XP_033738057.1	<i>Pecten maximus</i>	MFRLTSVDLYMRVHKVLNLRTIKMVMVVKVREETHTFHHGH HHHTPTRGHLVHHRHGHNSPAHTLKSIFGKYRHLRCSSPK PNISTPKSKRLSESKRNCLSSEFRKPFLIKNGAADDSDSVFIK EDFKLGKLLGAGGFGSVYMANGKSGHDSIAIKVMKKPTMS KNPDMFESFKAELRCMQLAHPNIVQSLGATHMTSFEDGA WVVMYAGDRTLQTALNESHVDLTIEIRVKFSTQIAQGLKYL HDNNIVHLDIKPANILITPDGVCKIGDLGCSQILEEGTGKVSP TQRSSLTGTFAYRAPELLRGDAPTRKADIYSYGVMTMWQMLA RDNPYGNENQHVVIFGVVAYGHRPKHPNMSEQCPFELCYR DLYSQCWDSVPENRPSADELVKVLDVWKKNV
XP_046364430.1	<i>Haliotis rufescens</i>	MPKVAEDADDGPTEDGTDIAMVCDVIYRQSRSLSPNNTYD YTIESLSGATLSKKDVSLGRLLGSGGFGSVYLGTYKNKEVAV KILHAVTKNPQAQIQSFKAELAILNFKHPHIIRTITATTLEDF NDGAWVMEYVSDQTLHGVINNMDQQLCMVRRLLKYALQI ASAVQYAHDNICIVHLDIKPVNILLTQDDDCKLGDGFCCE VEFNTGRVSPTNRSALTGTFAYRAPELLKGGPPSLQADIYSFG VTLWQMLSRETPYANENQHVVIFGVVAYGLRPHKHPVIGDEP FDKLYQDLYTQCWVAGPEDRPTSTDLMELLETWKQYLD
XP_045157467.1	<i>Mercenaria mercenaria</i>	MLERQHSIGQTSKPHTPNRNHINRHSLQRQKSRRLFQKQR TSVCLFSSKPADDTLNNGEKVVS AKLRRMMLLKHTKFGFIES FQNLTVKQVCDTDCRVKGESDQLVQNYMPDPNLVFDSQIS AKIINKEEFELGRVLGAGGFGSVYLG SFKRQTV AIKVMHKYT KNPAQLESFRAELHVMRFNHPNIVKT LAATHIDQFDDGA WVVMYIGKSSLQGIINDHSEPFDSRRLKYSIQVASALAYA HKNKVAHLDLKPANILITSTDDCKVGDFGCSQRVEFDTGIVS PTNRSILTGTFAYPELLRGEPTFKADVSYGITMWQMK RETPFTNQNHVVIFGVVANGLRPKDPEPSETDPFELSYKDL YSQCWNACPLDRPSAQELVELLNIWKENL
XP_031759862.1	<i>Xenopus tropicalis</i>	MPSPIPVERFLPRDLSPSIDLRPCSSPLELSHRKVPGSGRHRLL PPRLAWCSIDWEQVRLLEPVGSGGFGSVYRAIYKGETVALKK VKRCTKNLSASRQSFWAELNAARLRHPHVVRVLAASASCP GDPGCPGTIIMEYAGDTLHGRIYGRCPPLGAAVCMRYARH VADGLCFLHRDGVVHLDLKPANVLLAPGGLCKIGDFGCSQ RLRDGD SAGGEPCTQLRHVGGTYTHRAPELLKGEPTAK ADIYSFAITLWQMVSRPELPTGDRQCVLYAVVAYALRPEMG PLFSCTEEGRAVRHIVQSCWAARPEERPSAEQLLERLEQESA LYRGVSSSPAQYTSPLSAAHRGP

NP_005363.1	Homo sapiens	MPSPLALRPYLRFSEFSPVDARPCSSPSELPKLLLGATLPRAP RLPRRLAWCSIDWEQVCLLQRLGAGGFGSVYKATYRGVPV AIKQVNKCTKNRLASRRSFWAELNVARLRHDNIVRVVAAS TRTPAGSNSLGTIIMEFGGNVTLHQVIYGAAGHPEGDAGEP HCRTGGQLSLGKCLKYSLDVVNGLLFLHSQSIVHLDLKPANI LISEQDVCKISDFGCSEKLEDLLCFQTPSYPLGGTYTHRAPEL LKGEVTPKADIYSFAITLWQMTTKQAPYSGERQHILYAVV AYDLRPSLSAAVFEDSLPGQRLGDVIQRCWRPSAAQRPSARL LLVDLTSLKAELG
NP_064405.2	Mus musculus	MPSPLSLCRYLPRELSPSVDSRSCSIPLVAPRKAGKFLGTTPP RAPGLPRRLAWFSIDWEQVCLMHRLGSGGFGSVYKATYHG VPVAIKQVNKCTKDLRASQRSFWAELNIARLRHDNIVRVVA ASTRTPEDSNSLGTIIMEFGGNVTLHQVIYGATRSPEPLSCRE QLSLGKCLKYSLDVVNGLLFLHSQSILHLDLKPANILISEQDV CKISDFGCSQKLQDLRCRQASPHHIGGTYTHQAPEILKGEIA TPKADIYSFGITLWQMTTREVYPYSGEPQYVQYAVVAYNLRPS LAGAVFTASLTGKTLQNIQSCWEARALQRPGAELLQRDLK AFRGALG
NP_991143.1	Danio rerio	MPSPIPVTRLLPKDFGLEFGACSSPLTKTASGSTLRVPTNKFH GKVAHRLWSSVIHWRELQALEPIGSGGFGTVFRGTYFGETV AVKKVKCVKNKLASRQSWAELNAAHLHHQNIVRVLAAT TCTPAHLNTKDNIGTIVMEFAGNINLQKLIYGLTDLLPVEKC IKYSIDIARALQHLHAHGVVHLDLKPANVLLSEQGVCKIAD FGCSFKISSTSDTVTHMNEIGGTFTHRAPELLKGEEVSPRVDV YSFGITLWQLLTREPPYEGDRQYILYAVVGYNLRPLTSRNVFT QFFIGQNCQKLISRCWDGDPsirPTADKFVDELSVLL
XP_022319224.1	Crassostrea virginica	MKTTSYSYSHQMTKTTFTTRSWQKLKHLISKYKRSRGGFFRK VMPKISLVHNKKLTHVNKEEVKLGRLLGAGGFGSVYLGSYR QHDVAVKIMHKQSKNAAQMESFKAELHVLD FEHPNIVRT LAATPFEEFPEGGWIVMEYAGSRTLQSMNLSEELCQETRIQF ALQMSDALQYIHQNHVHLHLDLKPANILITRGDIKIADFGCS QKVEVD TGLVSPTQRSLLTGTFAYRAPELLKGQVPSQKADIY ALGVT LWQMLARENPYGNENQHVVIFSVVAYGQRP PHPQI EMDPFEECYRDLYSQCWAVSQDRPSAKELHETLKIWK KYM
CAG2253472.1	Mytilus edulis	MQIKSKQNLCSVVKDKKYSSSLKGLNQCQHILRKYKLFRKK LGQFAKRIVMPVLAHKEKKRDEFKRPHAIVSSRHRNTSLKK EEVVLGRLLGTGGFGSVYRGKYKDSTVAVKVMHRVTKNPA AQLESFKAELNTIGFDHENIVKTITATSLDAFDQGAWIVMEY AGHRTLQSLIDDD SISLGPCRRVKFSQQIAEALKYAHDMKIV HLDLKPANILITPDGRCKVADFGCSQKVEIDTGIVSPTQRSIL TGTFAYRAPELLKGAEPSKRADIYALAVIMWQLLSRQTPFSN ENQHVVIFGVVAYGQRPKHPEIDVDPFEESYRDLYSQCWLP CALDRPTAGEIAELLNIWRGQGFGIATYMERNTVFKQNVW NFMYGKNGSSEHSDSEGEITPPIQAEKTVREVKTYSVLPPPAD YTPTEPLEDNKGEDEPSDSSSSSDSKPARKRKRKNRRHTEK CKEEKSHQHDTSDKKLTKNQKRKLKKRRKEKQKNEDKSV TFSFISSEDNQISAETTSNNEIQDRVADLSNFFDAVWDVYKL QEREKSDEQQDVFDELNKSLSLLDDHSKEIESQLNIIHNIKRLI LLGDMKSAGDLMSSMKSDGCFMSEGVNHLIIRLFEYWMKDI SDKG

>XP_046567047.1 *Haliotis rubra* MPKFEEHGADDGQTDDVADIEMVCDAIYRQSRSLSPNNTF
DHTIESLSGETLSKKDVSLGRLLGSGGFGSVYLGTYKNNEVA
VKIFHAVSKNPLAQVQSFAELAILNFKHPHIIRTLTATTLDD
FNDGPWVVMYVSDQTLQSVINDMDQQLCMVRRLKHALQ
IASAVQYAHDNCIVHLDIKPVNVLLTQDDDCKLGDFGCCQ
EVEFNTGRVSPTNRSALTGTFAYPELLKGGAPSLQADIYS
YGVTLWQMLSRETQYANENQHVVIFGVVAYGLRPHKHPVIG
DEPFDKLYQDLYTQCWVAEPDDRPTSELMEILETWKQYID
