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Product datasheet for MR217093

Homer2 (NM_011983) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Homer2 (NM_011983) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Homer2
Synonyms:	9330120H11Rik; AW539445; CPD; Vesl-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR217093 representing NM_011983
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGAGAACAGCCCATCTTCACCACGCGAGCGCACGTCTTCCAGATTGACCCCAGCACCAAGAAGAACT
GGGTGCCGGCAAGCAAGCAGGCCGTCACGGTTTCCTACTTCTATGATGTCACCAGGAACAGCTATCGGAT
CATCAGTGTGGATGGAGCCAAGGTGATCATAAACAGCACTATCACCCCGAACATGACTTTCACCAAAACG
TCACAGAAGTTCGGGCAGTGGGCTGACAGCAGAGCCAACACCGTGTTCGGTTTGGGATTCTCCTCCGAGC
TGCAGCTCACGAAGTTTGCAGAGAAGTTCCAGGAGGTAAGAGAAGCTGCCAGGCTAGCCAGAGACAAGTC
CCAGGAGAAAACCGAGACCTCCAGCAATCATTCCCAAGAATCTGGGTGTGAAACCCCGTCTTCCACTCAG
GCATCCAGCGTCAATGGCACAGACGACGAAAAGGCCTCTCACGCGAGCCCAGCCGACACTCACCTCAAGT
CTGAGAATGACAAGCTGAAGATCGCGCTGACACAGAGTGCTGCCAATGTGAAGAAGTGGGAGATGGAGCT
GCAGACCCTGCGGGAGAGCAACGCCCGGCTGACCACGGCACTGCAGGAGTCGGCGGCCAGCGTGGAGCAG
TGGAAGCGGCAGTTCTCCATCTGCAGGGACGAGAATGACAGGCTCCGCAGCAAGATCGAGGAGCTGGAAG
AACAGTGCAGCGAGATAAACAGGGAGAAGGAGAAGAACACACAGCTGAAGAGGAGGATCGAGGAGCTGGA
GTCAGAGGTCCGAGACAAGGAGATGGAGTTGAAAGATCTCCGAAAACAGAGTGAAATCATACCTCAGCTC
ATGTCCGAGTGTGAATATGTCTCTGAGAAGTTAGAGGCGGCCGAAAGAGACAATCAAAACTTGGAAGACA
AAGTGCGGTCTCTAAAGACAGACATCGAGGAGAGTAAATACCGACAGCGCCACCTGAAGGGGGAGCTGAA
GAGCTTCCTTGAGGTGCTGGATGGAAAGATCGACGACCTCCATGACTTCCGTAGAGGACTCTCCAAGTTA
GGCACAGATAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>MR217093 representing NM_011983
Red=Cloning site Green=Tags(s)

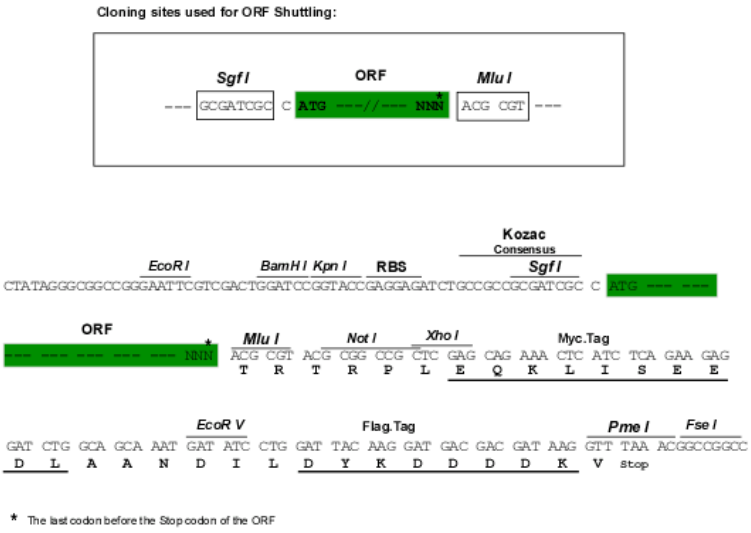
MGEQPIFTTRAHVFQIDPSTKKNWVPASKQAVTVSYFYDVTRNSYRIISVDGAKVIINSTITPNMTFTKT
SQKFGQWADSRANTVFGLGFSSELQLTKFAEKFQEVREAARLARDKSQEKTETSSNHSQESGCETPSSTQ
ASSVNGTDDEKASHASPADTHLKSENDKLKIALTQSAANVKKWEMELQTLRESNARLTTALQESAASVEQ
WKRQFSICRDENDRLRSKIEELEEQCSEINREKEKNTQLKRRIEELESEVRDKEMELKDLRKQSEIIPQL
MSECEYVSEKLEAAERDNQNLEDKVRSLKTDIEESKYRQRHLKGELKSFLEVLDGKIDDLHDFRRGLSKL
GTDN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1153_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_011983

ORF Size: 1062 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM_011983.2, NP_036113.1

RefSeq Size: 10999 bp

RefSeq ORF: 1065 bp

Locus ID: 26557

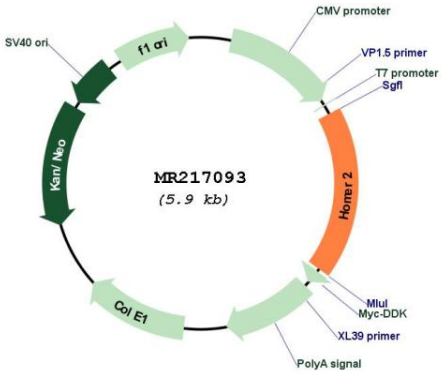
UniProt ID: Q9QWW1

Cytogenetics: 7 D3

MW: 41 kDa

Gene Summary: Postsynaptic density scaffolding protein. Binds and cross-links cytoplasmic regions of GRM1, GRM5, ITPR1, DNM3, RYR1, RYR2, SHANK1 and SHANK3. By physically linking GRM1 and GRM5 with ER-associated ITPR1 receptors, it aids the coupling of surface receptors to intracellular calcium release. May also couple GRM1 to PI3 kinase through its interaction with AGAP2 (By similarity). Isoforms can be differently regulated and may play an important role in maintaining the plasticity at glutamatergic synapses (By similarity) Required for normal hearing (PubMed:25816005). Negatively regulates T cell activation by inhibiting the calcineurin-NFAT pathway. Acts by competing with calcineurin/PPP3CA for NFAT protein binding, hence preventing NFAT activation by PPP3CA (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR217093