

## Product datasheet for **MC209737**

### Homer2 (NM\_011983) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Homer2 (NM\_011983) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Homer2  
**Synonyms:** 9330120H11Rik; AW539445; CPD; Vesl-2  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC209737 representing NM\_011983  
**Red**=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGGAGAACAGCCCATCTTCACCACGCGAGCGCAGTCTTCCAGATTGACCCAGCACCAAGAAGAACT  
GGGTGCCGGCAAGCAAGCAGGCCGTACGGTTTCTACTTCTATGATGTCACCAGGAACAGCTATCGGAT  
CATCAGTGTGGATGGAGCAAGGTGATCATAAACAGCACTATCACCCGAACATGACTTTCACAAAACG  
TCACAGAAAGTTCGGGCAGTGGGCTGACAGCAGAGCCAACACCGTGTTCGGTTTGGGATTCTCCTCGGAGC  
TGCAGCTCACGAAGTTTGCAGAGAAGTTCAGGAGGTAAGAGAAGCTGCCAGGCTAGCCAGAGACAAGTC  
CCAGGAGAAAACCGAGACCTCCAGCAATCATTCCAAGAATCTGGGTGTGAAACCCCGTCTTCCACTCAG  
GCATCCAGCGTCAATGGCACAGACGACGAAAAGGCCTCTCACGCGAGCCAGCCGACACTCACCTCAAGT  
CTGAGAATGACAAGCTGAAGATCGCGCTGACACAGAGTGTGCCAATGTGAAGAAGTGGGAGATGGAGCT  
GCAGACCTGCGGGAGAGCAACGCCCGGCTGACCACGGCACTGCAGGAGTCGGCGCCAGCGTGGAGCAG  
TGAAGCGGCAGTTCTCCATCTGCAGGGACGAGAATGACAGGCTCCGCAAGATCGAGGAGCTGGAAG  
AACAGTGCAGCGAGATAAACAGGGAGAAGGAGAACAACACAGCTGAAGAGGAGGATCGAGGAGCTGGA  
GTCAGAGGTCAGACAAAGGAGATGGAGTTGAAAGATCTCCGAAAACAGAGTGAATCATACCTCAGCTC  
ATGTCCGAGTGTGAATATGTCTCTGAGAAGTTAGAGGCGCCGAAAAGAGACAATCAAACTTGAAGACA  
AAGTGGGCTCTAAAGACAGACATCGAGGAGAGTAAATACCGACAGCGCCACCTGAAGGGGAGCTGAA  
GAGCTTCTTGAGGTGCTGGATGGAAAGATCGACGACCTCCATGACTTCCGTAGAGGACTCTCCAAGTTA  
GGCACAGATA**ACTAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAAGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_011983



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|                               |   |
|-------------------------------|---|
| <b>Insert Size:</b>           | 1065 bp   |
| <b>OTI Disclaimer:</b>        | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).  |
| <b>Components:</b>            | 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).  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>   |
| <b>RefSeq:</b>                | <u><a href="#">NM_011983.2</a></u> , <u><a href="#">NP_036113.1</a></u>   |
| <b>RefSeq Size:</b>           | 10999 bp  |
| <b>RefSeq ORF:</b>            | 1065 bp   |
| <b>Locus ID:</b>              | 26557   |
| <b>UniProt ID:</b>            | <u><a href="#">Q9QWW1</a></u>   |
| <b>Cytogenetics:</b>          | 7 D3  |
| <b>Gene Summary:</b>          | <p>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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p> |