

Product datasheet for RC204165

HOMER2 (NM_004839) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HOMER2 (NM_004839) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HOMER2
Synonyms:	ACPD; CPD; DFNA68; HOMER-2; VESL-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204165 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGGAGAACAGCCCATCTTCACCACCCGAGCGCATGTCTTCCAGATTGACCCCAACACCAAGAAGAACT
GGATGCCTGCGAGCAAGCAGGCGGTACCGTTTCTACTTCTATGATGTCACAAGGAACAGCTATCGGAT
CATCAGTGTGGACGGAGCCAAGGTGATCATAAACAGCACAATCACACCGAATATGACCTTACCAAAAACG
TCACAGAAAGTTGGGCAGTGGCCGACAGCAGACCAACACAGTGTGGTTTGGGGTTTCTCTGAGC
AGCAGCTGACAAAGTTTGCAGAGAAATCCAGGAGGTGAAAGAAGCTGCCAAGATAGCCAAGACAAGAC
GCAGGAGAAAATCGAGACCTCAAGTAATCATTCCAAGCATCCAGTGTCAACGGGACGGACGATGAAAAG
GCCTCTCACGCCGGTCCAGCCAACACACACCTGAAGTCTGAGAATGACAAGCTGAAGATTGCCTTGACGC
AGAGCGCAGCCAACGTGAAGAAGTGGGAGATCGAGCTGCAGACCCCTCGGGAGAGCAATGCACGGCTGAC
CACAGCACTGCAGGAGTCGGCAGCCAGTGTGGAGCAGTGGAAAGGACAGTTCTCCATCTGCCGTGATGAG
AATGACCGGCTCCGCAACAAGATTGATGAGCTGGAAGAACAATGCAGTGAGATCAACAGAGAGAAGGAGA
AGAACACGCAGCTGAAGAGGAGGATCGAGGAGCTGGAGGCAGAGCTCCGAGAAAAGGAGACAGAGCTGAA
AGATCTCCGAAAACAAAGTGAATCATACTCAGTCTATGTCAGAGTGCAGTATGTCCTGAGAAGCTA
GAGGCGGCAGAGAGACAATCAAACCTGGAAGACAAAGTCCGTTCTTAAAGACAGACATTGAGGAGA
GCAAATACCGACAGCGCCACCTGAAGGTGGAGTTGAAGAGCTTCCCTGGAGGTGCTGGACGGGAAGATTGA
CGACCTGCATGACTTCCGCCGAGGGCTCTCCAAGCTGGGCACCGATAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC204165 protein sequence
Red=Cloning site Green=Tags(s)

MGEQPIFTTRAHVFDIDPNTKKNWMPASKQAVTVSYFYDVTRNSYRIISVDGAKVIINSTITPNMTFTKT
 SQKFGQWADSRANTVFGGLFSSEQQLTKFAEKFEVKEAAKIAKDKTQEKIETSSNHSQASSVNGTDDEK
 ASHAGPANTHLKSENDLKIALLTQSAANVKKWEIELQTLRESNARLTTALQESAASVEQWKRQFSICRDE
 NDRLRNKIDEELEEQCSEINREKEKNTQLKRRIEELEAELREKETELKDLRKQSEIIPQLMSECEYVSEKL
 EAAERDNQNLKDYRSLKTDIEESKYRQRHLKVELKSFLEVLGDGKIDDLHDFRRLGSKLGTDN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6174_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004839

ORF Size: 1029 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_004839.4](#)

RefSeq Size: 1976 bp

RefSeq ORF: 1032 bp

Locus ID: 9455

UniProt ID: [Q9NSB8](#)

Cytogenetics: 15q25.2

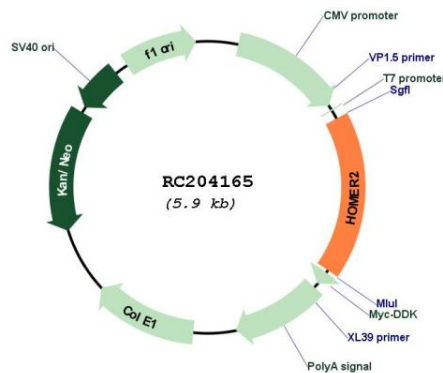
Domains: WH1

Protein Families: Druggable Genome

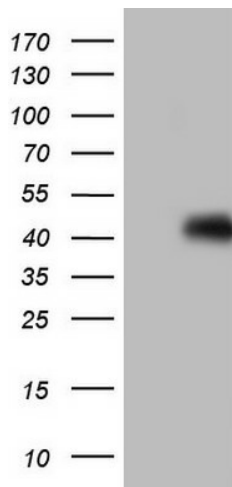
MW: 39.5 kDa

Gene Summary: This gene encodes a member of the homer family of dendritic proteins. Members of this family regulate group 1 metabotropic glutamate receptor function. The encoded protein is a postsynaptic density scaffolding protein. Alternative splicing results in multiple transcript variants. Two related pseudogenes have been identified on chromosome 14. [provided by RefSeq, Jun 2011]

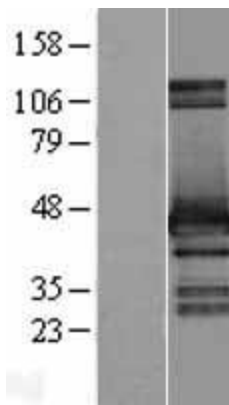
Product images:



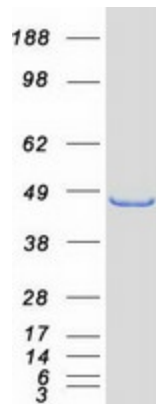
Circular map for RC204165



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HOMER2 (Cat# RC204165, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HOMER2 (Cat# [TA806246]). Positive lysates [LY401516] (100ug) and [LC401516] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401516]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204165 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HOMER2 protein (Cat# [TP304165]). The protein was produced from HEK293T cells transfected with HOMER2 cDNA clone (Cat# RC204165) using MegaTran 2.0 (Cat# [TT210002]).