

## Product datasheet for RC204168

### HOMER3 (NM\_004838) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HOMER3 (NM_004838) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HOMER3
Synonyms:	HOMER-3; VESL3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204168 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGTCCACAGCCAGGGAGCAGCCAATCTTCAGCACACGGGCGCACGTGTTCCAAATTGACCCAGCCACCA  
AGCGAACTGGATCCCAGCGGGCAAGCAGCAGCTACTGTCTCTATTTCTACGATGCCACCCGCAATGT  
GTACCGCATCATCAGCATCGGAGGCGCCAAGGCCATCATCAACAGCACTGCTACTCCCAACATGACCTTC  
ACCAAACTTCCCAGAAGTTCGGGCAGTGGGCCAGACGTCGCGCCAACACAGTCTACGGCTTGGGCTTTG  
CCTCTGAACAGCATCTGACACAGTTTGCCGAGAAGTTCAGGAAGTGAAGGAAGCAGCCAGGCTGGCCAG  
GGAGAAATCTCAGGATGGCGGGGAGCTCACCAGTCCAGCCCTGGGGCTCGCCTCCCACCAGGTGCCCCCG  
AGCCCTCTCGTCAGTGCCAACGGCCCGGCGAGGAAAACTGTTCCGCAGCCAGAGCGCTGATGCCCCCG  
GCCCCACAGAGCGCAGCGGCTAAAGAAGATGTTGTCTGAGGGCTCCGTGGGCGAGGTACAGTGGGAGGC  
CGAGTTTTTTCGCACTGCAGGACAGCAACAAGCTGGCAGGCGCCCTGCGAGAGGCCAACCGCCGCGCA  
GCCCAGTGGAGGCAGCAGCTGGAGGCTCAGCGTGCAGAGGCCGAGCGGCTGCGGCAGCGGGTGGCTGAGC  
TGGAGGCTCAGGCAGCTTCAAGGTGACCCCAACGGTGAAGAGGAGGGGCTGGCCAGGGCCAGTCGCT  
GGAACAGCTGGAAGCTCTGGTGCAAACCAAGGACCAGGAGATTCAGACCTGAAGAGTCAGACTGGGGGG  
CCCCGCGAGGCCCTGGAGGCTGCCGAGCGTGAGGAGACTCAGCAGAAGGTGCAGGACCTGGAGACCCGCA  
ATGCGGAGTTGGAGCACCAGCTGCGGGGATGGAGCGCAGCCTGGAGGAGGCACGGGCAGAGCGGGAGCG  
GGCGCGGGCTGAGGTGGCCCGGCGACGCGAGCTGCTGGACGTCAGGCTGTTTGGAGCTGAGTGAGCTGCGT  
GAGGGCTGGCCGCTGGCTGAGGCTGCGCCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC204168 protein sequence  
Red=Cloning site Green=Tags(s)

```
MSTAREQPIFSTRAHVFQIDPATKRNWIPAGKHALTVSYFYDATRNVYRIISIGGAKAIINSTVTPNMTF
TKTSQKFGQWADSRANTVYGLGFASEQHLTQFAEKFQEVKEAARLAREKSQDGGELTSPALGLASHQVPP
SPLVSANGPGEEKLFRSQSADAPGPTERERLKKMLSEGSVGEVQWEAEFFALQDSNNKLAGALREANAAA
AQWRQLEAQRAEAERLRQRVALEAQAASEVPTTGEKEGLGQQSLEQLEALVQTKDQEIQTLSQGTGG
PREALEAAEREETQQKVQDLETRNALEHQLRAMERSLEEARAERERARAEVGRAAQLLDVRLFELSELR
EGLARLAEAAP
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6431\\_d09.zip](https://cdn.origene.com/chromatograms/mk6431_d09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004838

**ORF Size:** 1083 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\\_004838.2](#), [NP\\_004829.2](#)

**RefSeq Size:** 1587 bp

**RefSeq ORF:** 1086 bp

**Locus ID:** 9454

**UniProt ID:** [Q9NSC5](#)

**Cytogenetics:** 19p13.11

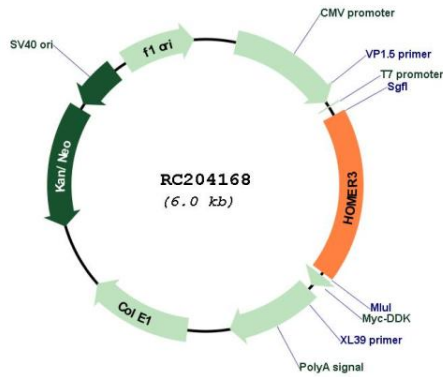
**Domains:** WH1

**Protein Families:** Druggable Genome

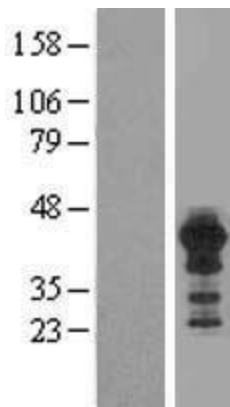
**MW:** 39.9 kDa

**Gene Summary:** This gene encodes a member of the HOMER family of postsynaptic density scaffolding proteins that share a similar domain structure consisting of an N-terminal Enabled/vasodilator-stimulated phosphoprotein homology 1 domain which mediates protein-protein interactions, and a carboxy-terminal coiled-coil domain and two leucine zipper motifs that are involved in self-oligomerization. The encoded protein binds numerous other proteins including group I metabotropic glutamate receptors, inositol 1,4,5-trisphosphate receptors and amyloid precursor proteins and has been implicated in diverse biological functions such as neuronal signaling, T-cell activation and trafficking of amyloid beta peptides. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Mar 2009]

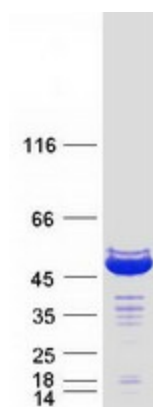
Product images:



Circular map for RC204168



Western blot validation of overexpression lysate (Cat# [LY428986]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226668] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HOMER3 protein (Cat# [TP304168]). The protein was produced from HEK293T cells transfected with HOMER3 cDNA clone (Cat# RC204168) using MegaTran 2.0 (Cat# [TT210002]).