

**Homer1 Rabbit mAb**  
**Catalog # AP75566****Specification**

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**Homer1 Rabbit mAb - Product Information**

Application	WB, IP
Primary Accession	<a href="#">Q86YM7</a>
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	40277

**Homer1 Rabbit mAb - Additional Information****Gene ID** 9456**Other Names**  
HOMER1**Dilution**  
WB~~1/500-1/1000  
IP~~1/20**Format**  
Liquid**Homer1 Rabbit mAb - Protein Information****Name** HOMER1 ([HGNC:17512](#))**Function**

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. Isoform 1 regulates the trafficking and surface expression of GRM5. Isoform 3 acts as a natural dominant negative, in dynamic competition with constitutively expressed isoform 1 to regulate synaptic metabotropic glutamate function. Isoform 3, may be involved in the structural changes that occur at synapses during long-lasting neuronal plasticity and development. Forms a high-order complex with SHANK1, which in turn is necessary for the structural and functional integrity of dendritic spines (By similarity). 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 (PubMed:<a href="http://www.uniprot.org/citations/18218901" target="\_blank">18218901</a>).

**Cellular Location**

Cytoplasm. Postsynaptic density. Synapse. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q9Z214}. Note=Isoform 1 inhibits surface expression of GRM5 causing

it to be retained in the endoplasmic reticulum.

### Homer1 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Homer1 Rabbit mAb - Images



