

**Anti-Homer1 Rabbit Monoclonal Antibody**  
**Catalog # ABO16498****Specification**

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**Anti-Homer1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IP
Primary Accession	<a href="#">Q86YM7</a>
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Homer1 Rabbit Monoclonal Antibody . Tested in WB, IHC, IP applications. This antibody reacts with Human, Mouse, Rat.

**Anti-Homer1 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 9456

**Other Names**

Homer protein homolog 1, Homer-1, HOMER1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=17512" target="\_blank">HGNC:17512</a>)

**Calculated MW**

45 kDa KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>IP 1:50

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Homer1

**Purification**

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-Homer1 Rabbit Monoclonal Antibody - 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

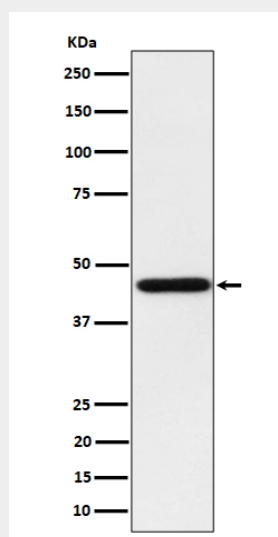
Cytoplasm. Postsynaptic density. Synapse. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q9Z214}. Note=Isoform 1 inhibits surface expression of GRM5 causing it to be retained in the endoplasmic reticulum.

### Anti-Homer1 Rabbit Monoclonal Antibody - 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](#)

### Anti-Homer1 Rabbit Monoclonal Antibody - Images



Western blot analysis of Homer1 expression in HepG2 cell lysate.