

Homer1 Rabbit mAb Catalog # AP75566

Specification

Homer1 Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IP
O86YM7
Mouse, Rat
Rabbit
Monoclonal Antibody

40277

40277

Homer1 Rabbit mAb - Additional Information

Gene ID 9456

Other Names HOMER1

DilutionWB~~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:http://www.uniprot.org/citations/18218901" target="blank">http://www.uniprot.org/citations/18218901" target="blank">http://www.uniprot.org/citations/18218901" target="blank">http://www.uniprot.org/citations/18218901"

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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Homer1 Rabbit mAb - Images







