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HOMER3 Rabbit pAb

Catalog # AP98339

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9NSC5
Other Accession	Q9NSC5
Predicted	Rat, Human, Mouse, Chicken, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39836
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HOMER3
Epitope Specificity	51-250/361
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the Homer family.Contains 1 WH1 domain.
SUBUNIT	Isoform 1 and isoform 2 encode coiled-coil structures that mediate homo- and heteromultimerization.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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-termina coiled-coil domain and two leucine zipper motifs that are involved l 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.

Additional Information

Gene ID	9454
Other Names	HOMER-3; VESL3; HOME3_HUMAN; HOMER3; HOME3_MOUSE; homer scaffold protein 3; homer homolog 3 (Drosophila); homer scaffolding protein 3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	HOMER3 (HGNC:17514)
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. Isoforms can be differently regulated and may play an important role in maintaining the plasticity at glutamatergic synapses. 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:18218901).
Cellular Location	Cytoplasm. Postsynaptic density. Synapse. Note=Postsynaptic density of neuronal cells.

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