

HOMER3 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP6992c

Specification

HOMER3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

Q9NSC5

HOMER3 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 9454

Other Names

Homer protein homolog 3, Homer-3, HOMER3

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6992c was selected from the Center region of human HOMER3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HOMER3 Antibody (Center) Blocking Peptide - 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.



HOMER3 Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

HOMER3 Antibody (Center) Blocking Peptide - Images

HOMER3 Antibody (Center) Blocking Peptide - Background

HOMER3 is 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. This 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.

HOMER3 Antibody (Center) Blocking Peptide - References

Norton, N., et.al., Am. J. Med. Genet. B Neuropsychiatr. Genet. 120B (1), 18-21 (2003)