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Anti-HOMER3 Picoband Antibody

Catalog # ABO13064

Specification

Anti-HOMER3 Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q9NSC5
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Homer protein homolog 3(HOMER3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-HOMER3 Picoband Antibody - Additional Information

Gene ID 9454

Other Names
Homer protein homolog 3, Homer-3, HOMER3

Calculated MW
39836 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
 Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat,

Subcellular Localization
Cytoplasm . Cell junction, synapse, postsynaptic cell membrane, postsynaptic density . Cell junction, synapse . Postsynaptic density of neuronal cells. .

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived human HOMER3 recombinant protein (Position: R282-A360). Human HOMER3 shares 88.6% and 89.9% amino acid (aa) sequence identity with mouse and rat HOMER3, respectively.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time. Avoid repeated freezing and thawing.**

Anti-HOMER3 Picoband Antibody - 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.

Anti-HOMER3 Picoband 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 Cytomety
- Cell Culture

Anti-HOMER3 Picoband Antibody - Images

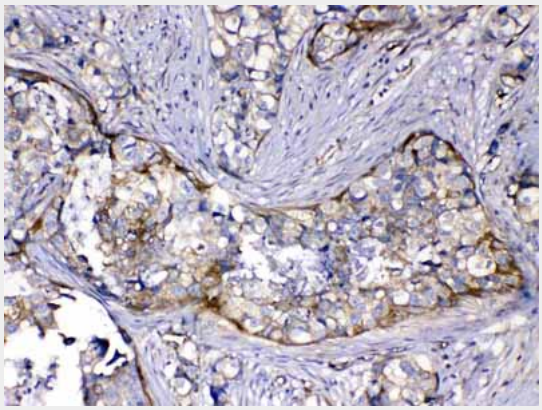

Figure 4. IHC analysis of HOMER3 using anti-HOMER3 antibody (ABO13064).

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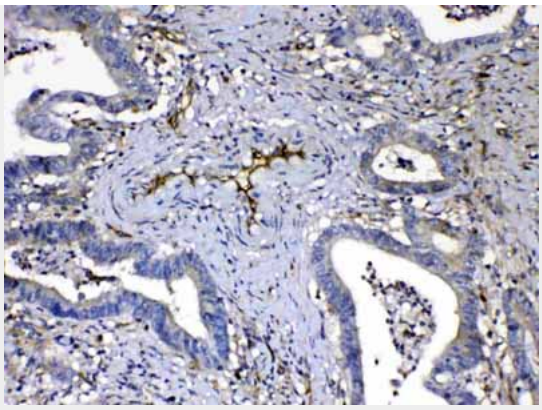

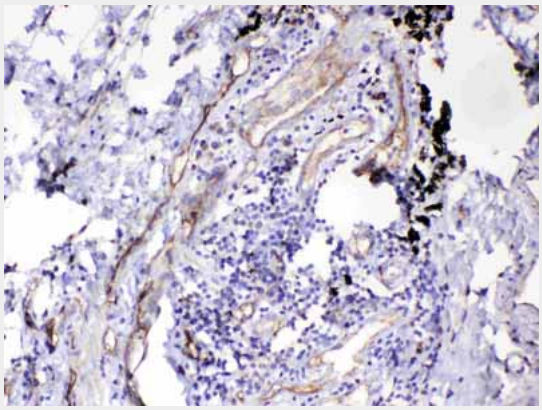

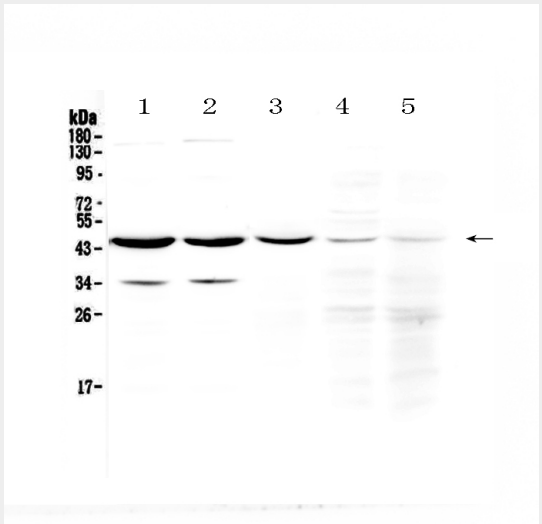

Anti-HOMER3 Picoband Antibody - Background

Homer protein homolog 3 is a protein that in humans is encoded by the HOMER3 gene. 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-terminal coiled-coil domain and two leucine zipper motifs that are involved 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.