

Anti-HOMER3 Picoband Antibody

Catalog # ABO13064

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.

Additional Information

Gene ID	9454
Other Names	Homer protein homolog 3, Homer-3, HOMER3
Calculated MW	39836
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Mouse, Rat,
Subcellular Localization	Cytoplasm . Cell junction, synapse, postsynaptic cell membrane, postsynaptic density . Cell junction, synapse . Postsynaptic density of neuronal cells. .
Source	Eukaryota
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.

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.

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.

Images

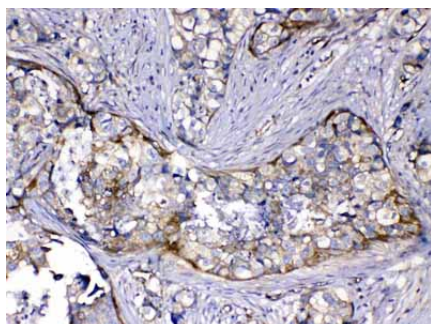
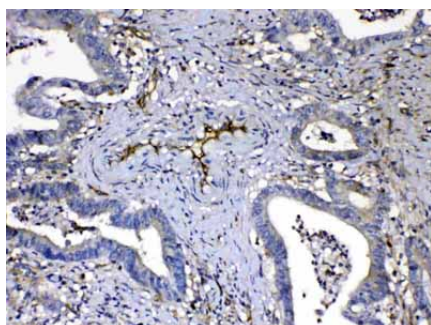
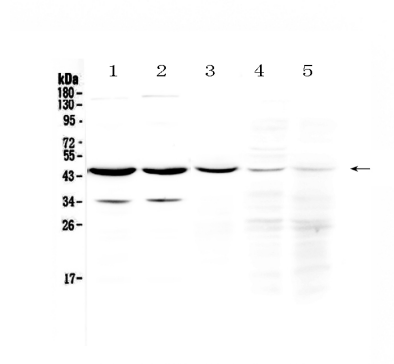
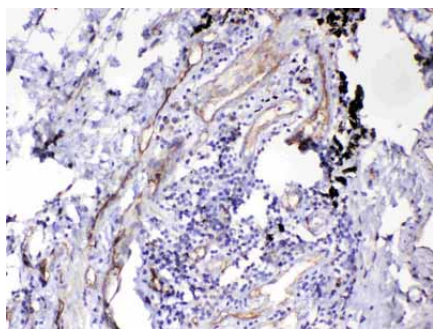


Figure 4. IHC analysis of HOMER3 using anti-HOMER3 antibody (ABO13064).





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