

Rabbit HOMER3 Polyclonal Antibody | anti-HOMER3 antibody

Anti-HOMER3 Picoband Antibody

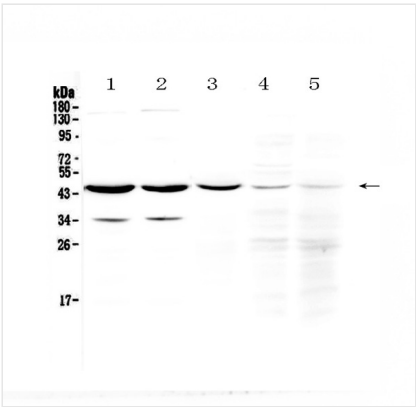
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124742	Rabbit	Human, Mouse, Rat No cross reactivity with other proteins.	Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

HOMER3; Polyclonal Antibody; Anti-HOMER3 Picoband Antibody; Homer protein homolog 3; Homer-3; anti-HOMER3 antibody

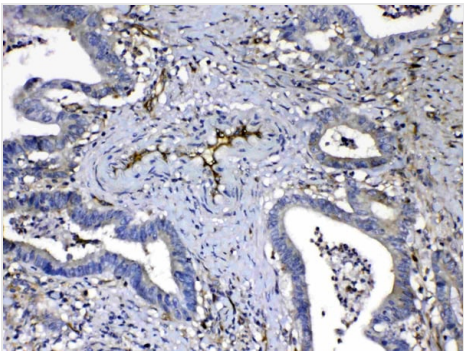
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified
Form/Format	Lyophilized
Concentration	Add 0.2ml of distilled water will yield a concentration of 500ug/ml. (varies by lot)
Sequence Length	325
Applicable Applications for anti-HOMER3 antibody	WB (Western Blot), IHC (Immunohistochemistry)
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.
Subcellular Localization	Cytoplasm. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cell junction, synapse. Postsynaptic density of neuronal cells.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



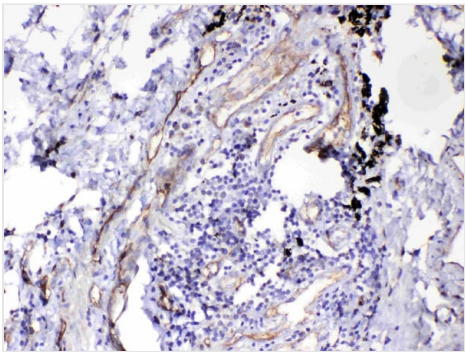
WB (Western Blot)

Figure 1. Western blot analysis of HOMER3 using anti-HOMER3 antibody (AAA124742). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysate, Lane 2: mouse brain tissue lysate, Lane 3: human U-87MG whole Cell lysate, Lane 4: human Hela whole Cell lysate, Lane 5: human Jurkat whole Cell lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HOMER3 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HOMER3 at approximately 45KD. The expected band size for HOMER3 is at 40KD.



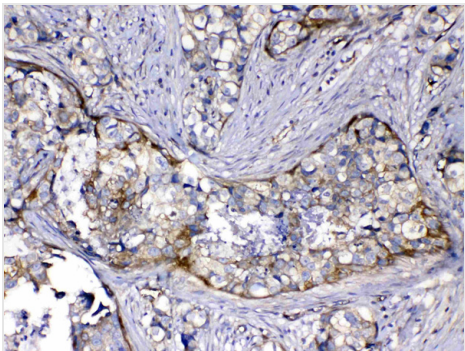
IHC (Immunohistochemistry)

Figure 2. IHC analysis of HOMER3 using anti-HOMER3 antibody (AAA124742). HOMER3 was detected in paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HOMER3 Antibody (AAA124742) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of HOMER3 using anti-HOMER3 antibody (AAA124742). HOMER3 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HOMER3 Antibody (AAA124742) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 4. IHC analysis of HOMER3 using anti-HOMER3 antibody (AAA124742). HOMER3 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HOMER3 Antibody (AAA124742) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-HOMER3 antibody	Description: 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. Protein 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.
Product Categories/Family for anti-HOMER3 antibody	Neuroscience; Neurotransmission; Receptors/channels; gpcr; glutamate Receptors; Neuroscience; Cell Type Marker; neuron marker; synapse marker

NCBI AND UNIPROT INFORMATION

NCBI GI #	224809410
NCBI GeneID	9454
NCBI Accession #	NP_001139193.1
NCBI GenBank Nucleotide #	NM_001145721.1
UniProt Accession #	Q9NSC5; O14580; O95350; Q9NSB9; Q9NSC0; Q9NSC1; B2RA10; E9PCW9
Molecular Weight	39836 MW
NCBI Official Full Name	homer protein homolog 3 isoform 2
UniProt Protein Name	Homer protein homolog 3
UniProt Gene Name	HOMER3
UniProt Synonym Gene Names	Homer-3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.