

Homer-3 (H-134): sc-28967

BACKGROUND

Homer (also designated Ves1, for VASP/Ena-related gene up-regulated during seizure and LTP) family proteins are immediate early gene products that bind to group 1 metabotropic glutamate receptors (mGluRs), proteins involved in triggering intracellular calcium release. Unlike Homer-1a, the prototype member of the Homer family, other Homer family members (Homer-1b and -1c, Homer-2a, -2b, -2c and Homer-3) are constitutively expressed and contain a coiled-coil (CC) domain that mediates self-multimerization. Homer-1a is enriched at excitatory synapses, does not multimerize and appears to block the association of mGluRs to CC-Homer proteins. Homer proteins have also been shown to link mGluRs with the inositol triphosphate receptors (IP3R).

CHROMOSOMAL LOCATION

Genetic locus: HOMER3 (human) mapping to 19p13.11; Homer3 (mouse) mapping to 8 B3.3.

SOURCE

Homer-3 (H-134) is a rabbit polyclonal antibody raised against amino acids 228-361 mapping at the C-terminus of Homer-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Homer-3 (H-134) is recommended for detection of Homer-3a and Homer-3b of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Homer-3 (H-134) is also recommended for detection of Homer-3a and Homer-3b in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Homer-3 siRNA (h): sc-43850, Homer-3 siRNA (m): sc-42193, Homer-3 shRNA Plasmid (h): sc-43850-SH, Homer-3 shRNA Plasmid (m): sc-42193-SH, Homer-3 shRNA (h) Lentiviral Particles: sc-43850-V and Homer-3 shRNA (m) Lentiviral Particles: sc-42193-V.

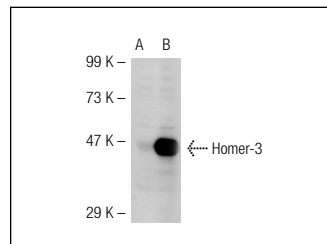
Molecular Weight of Homer-3: 47 kDa.

Positive Controls: Homer-3 (m): 293T Lysate: sc-120874 or rat brain extract: sc-2392.

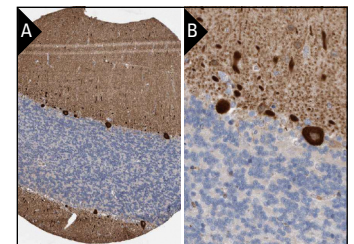
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Homer-3 (H-134): sc-28967. Western blot analysis of Homer-3 expression in non-transfected: sc-117752 (A) and mouse Homer-3 transfected: sc-120874 (B) 293T whole cell lysates.



Homer-3 (H-134): sc-28967. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing cytoplasmic staining of cells in the molecular layer & Purkinje cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Homer-3 (E-2): sc-376154** or **Homer-3 (H-5): sc-271653**, our highly recommended monoclonal alternatives to Homer-3 (H-134).