X11γ (H-206): sc-28970

BACKGROUND

The β-Amyloid precursor protein (β-APP) is a major constituent of the amyloid deposits in patients with Alzheimer's disease. The β-Amyloid precursor is known to interact with several proteins, including X11 and the G heterotri-metric protein APP-BP1. The neuronal, transmembrane protein X11 is known to bind to the β-Amyloid precursor protein via a phosphotyrosine binding (PTB) domain, reducing the secretion of cellular β-APP and slowing β-APP processing pathways. X11 binds specifically to the YENPTY motif, which is involved in the internalization of β-APP. Multiple splice varitents of X11 have been identified, including X11α (also designated Mint 1), X11β (Mint 2) and X11γ (Mint 3).

REFERENCES

1. Borg, J.P., et al. 1996. The phosphotyrosine interaction domains of X11 and FE65 bind to distinct sites on the YENPTY motif of amyloid precursor protein. Mol. Cell. Biol. 16: 6229-6241.

2. Okamoto, M., et al. 1997. Mints, Munc18-interacting proteins in synaptic vesicle exocytosis. J. Biol. Chem. 272: 31459-31464.

3. Zhang, Z., et al. 1997. Sequence-specific recognition of the internalization motif of the Alzheimer's amyloid precursor protein by the X11 PTB domain. EMBO J. 16: 6141-6150.

4. Russo, T., et al. 1998. Fe65 and the protein network centered around the cytosolic domain of the Alzheimer's β-amyloid precursor protein. FEBS Lett. 434: 1-7.

5. Sastre, M., et al. 1998. X11 interaction with β-amyloid precursor protein modulates its cellular stabilization and reduces amyloid β-protein secretion. J. Biol. Chem. 273: 22351-22357.

6. Borg, J.P., et al. 1998. The X11α protein slows cellular amyloid precursor protein processing and reduces Aβ40 and Aβ42 secretion. J. Biol. Chem. 273: 14761-14766.

CHROMOSOMAL LOCATION

Genetic locus: APBA3 (human) mapping to 19p13.3; Apba3 (mouse) mapping to 10 C1.

SOURCE

X11γ (H-206) is a rabbit polyclonal antibody raised against amino acids 1-206 mapping at the N-terminus of x11γ 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

X11γ (H-206) is recommended for detection of x11γ of human and, to a lesser extent, mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for X11γ siRNA (h): sc-36847, X11γ siRNA (m): sc-36848, X11γ shRNA Plasmid (h): sc-36847-SH, X11γ shRNA Plasmid (m): sc-36848-SH, X11γ shRNA (h) Lentiviral Particles: sc-36847-V and X11γ shRNA (m) Lentiviral Particles: sc-36848-V.

Molecular Weight of X11γ: 72 kDa.

Positive Controls: RSV-3T3 whole cell lysate.

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.

DATA
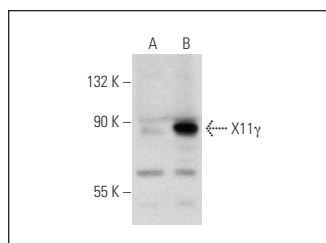
X11γ (H-206): sc-28970. Western blot analysis of X11γ expression in non-transfected: sc-117752 (**A**) and mouse X11γ transfected: sc-124660 (**B**) 293T whole cell lysates.

PROTOCOLS

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

MONOS
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Try **X11γ (B-6): sc-390819** or **X11γ (H-6): sc-514074,** our highly recommended monoclonal alternatives to X11γ (H-206).