

X11 γ (M-165): sc-28969

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 heterotrimeric 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 variants of X11 have been identified, including X11 α (also designated Mint 1), X11 β (Mint 2) and X11 γ (Mint 3).

REFERENCES

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3. Zhang, Z., Lee, C.H., Mandiyan, V., Borg, J.P., Margolis, B., Schlessinger, J. and Kuriyan, J. 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., Faraonio, R., Minopoli, G., De Candia, P., De Renzis, S. and Zambrano, N. 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., Turner, R.S. and Levy, E. 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., Yang, Y., De Taddeo-Borg, M., Margolis, B., Turner, R.S. 1998. The X11 α protein slows cellular amyloid precursor protein processing and reduces A β 40 and A β 42 secretion. *J. Biol. Chem.* 273: 14761-14766.

CHROMOSOMAL LOCATION

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

SOURCE

X11 γ (M-165) is a rabbit polyclonal antibody raised against amino acids 1-165 mapping at the N-terminus of x11 γ of mouse origin.

PRODUCT

Each vial contains 200 μ g 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.

APPLICATIONS

X11 γ (M-165) is recommended for detection of X11 γ of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 X11 γ siRNA (h): sc-36847, X11 γ siRNA (m): sc-36848, X11 γ shRNA Plasmid (h): sc-36847-SH, X11 γ shRNA Plasmid (m): sc-36848-SH, X11 γ shRNA (h) Lentiviral Particles: sc-36847-V and X11 γ shRNA (m) Lentiviral Particles: sc-36848-V.

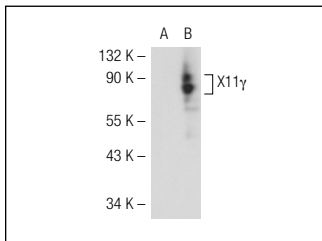
Molecular Weight of X11 γ : 89 kDa.

Positive Controls: mouse brain extract: sc-2253.

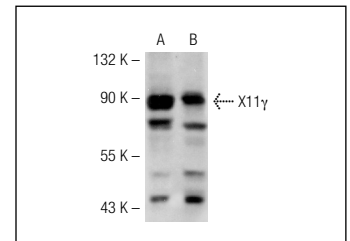
RECOMMENDED SECONDARY REAGENTS

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



X11 γ (M-165): sc-28969. Western blot analysis of X11 γ expression in non-transfected: sc-117752 (A) and mouse X11 γ transfected: sc-124660 (B) 293T whole cell lysates.



X11 γ (M-165): sc-28969. Western blot analysis of X11 γ expression in 293T whole cell lysate (A) and mouse brain tissue extract (B).

RESEARCH USE

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


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Try **X11 γ (B-6): sc-390819** or **X11 γ (H-6): sc-514074**, our highly recommended monoclonal alternatives to X11 γ (M-165).