



β-Amyloid (9F1): sc-81440

BACKGROUND

Proteolytic cleavage of the Amyloid protein precursor (APP) gives rise to the β-Amyloid and Amyloid A4 proteins, which are present in human platelets. Amyloid deposition is associated with type II diabetes, Down syndrome and a variety of neurological disorders, including Alzheimer's disease. The Amyloid precursor protein (APP) undergoes alternative splicing, resulting in several isoforms. Proteolytic cleavage of APP leads to the formation of the Amyloid β/A4 Amyloid protein. This protein is involved in the formation of neurofibrillary tangles and plaques that characterize the senile plaques of Alzheimer's patients. APLP1 (Amyloid precursor-like protein 1) and APLP2 are structurally similar to APP. Human APLP2 is a membrane-bound sperm protein that contains a region highly homologous to the transmembrane-cytoplasmic domains of APP found in brain plaques of Alzheimer's disease patients.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: APP (human) mapping to 21q21.3.

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.

SOURCE

β-Amyloid (9F1) is a mouse monoclonal antibody raised against the C-terminus of β-Amyloid of human origin.

PRODUCT

Each vial contains 50 μg IgG₁ in 500 μl PBS with < 0.1% sodium azide, 1% gelatin, PEG and sucrose.

APPLICATIONS

β-Amyloid (9F1) is recommended for detection of the C-termini of β-Amyloid (1-40), also designated β-APP40, and β-Amyloid (1-42), also designated β-APP42, of 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); may cross-react with APP.

Suitable for use as control antibody for APP siRNA (h): sc-29677, APP shRNA Plasmid (h): sc-29677-SH and APP shRNA (h) Lentiviral Particles: sc-29677-V.

Molecular Weight of β-Amyloid: 4-46 kDa.

Molecular Weight of Amyloid A4: 100-125 kDa.

Positive Controls: H4 cell lysate: sc-2408, U-87 MG cell lysate: sc-2411 or PC-3 cell lysate: sc-2220.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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