BACKGROUND

γ-secretase cleaves the cell surface protein amyloid protein precursor (APP) at the transmembrane region into an extracellular peptide (β-amyloid) and an intracellular tail fragment. The cytoplasmic tail of APP forms a multimeric complex with Fe65 (also known as APBB1 for APP binding protein family B member 1). Specifically, Fe65 binds the YENPTY sequence in the cytoplasmic tail of APP. Fe65 is a nuclear adaptor protein widely expressed in the brain, including hippocampus and isocortex. In the cell, Fe65 and APP colocalize to the ER and Golgi. The interaction between APP and Fe65 increases the translocation of APP to the cell surface and the subsequent secretion of β-Amyloid. Fe65 and APP localize with Mena, a cell-adhesion protein, and Fe65 regulates APP-dependent changes in cell motility. The gene encoding human Fe65 maps to chromosome 11p15.4.

CHROMOSOMAL LOCATION

Genetic locus: APBB1 (human) mapping to 11p15.4; Apbb1 (mouse) mapping to 7E3.

SOURCE

Fe65 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Fe65 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.

Blocking peptide available for competition studies, sc-19751 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Fe65 (E-20) is recommended for detection of Fe65 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).

Fe65 (E-20) is also recommended for detection of Fe65 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Fe65 siRNA (h): sc-41954, Fe65 siRNA (m): sc-41955, Fe65 shRNA Plasmid (h): sc-41954-SH, Fe65 shRNA Plasmid (m): sc-41955-SH, Fe65 shRNA (h) Lentiviral Particles: sc-41954-V and Fe65 shRNA (m) Lentiviral Particles: sc-41955-V.

Molecular Weight of Fe65: 85-90 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or Fe65 (h): 293T Lysate: sc-175237.

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.

DATA


SELECT PRODUCT CITATIONS


PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try Fe65 (F-6): sc-398389 or Fe65 (D-11): sc-374641, our highly recommended monoclonal alternatives to Fe65 (E-20).