

Fe65 (H-260): sc-33155

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 co-localize 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 7 E3.

SOURCE

Fe65 (H-260) is a rabbit polyclonal antibody raised against amino acids 1-150 mapping at the N-terminus of Fe65 of human 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

Fe65 (H-260) is recommended for detection of Fe65 isoforms 1 and 2 of mouse, rat and 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), 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 (H-260) is also recommended for detection of Fe65 isoforms 1 and 2 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.

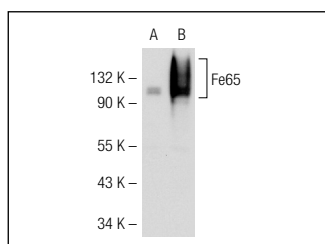
Molecular Weight of Fe65: 85-90 kDa.

Positive Controls: Fe65 (m): 293T Lysate: sc-126844, NIH/3T3 whole cell lysate: sc-2210 or HeLa whole cell lysate: sc-2200.

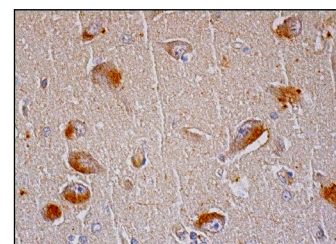
RECOMMENDED SECONDARY REAGENTS

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



Fe65 (H-260): sc-33155. Western blot analysis of Fe65 expression in non-transfected: sc-117752 (A) and mouse Fe65 transfected: sc-126844 (B) 293T whole cell lysates.



Fe65 (H-260): sc-33155. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing cytoplasmic staining of neuronal cells.

SELECT PRODUCT CITATIONS

- Di Paola, D., et al. 2010. Increased origin activity in transformed versus normal cells: identification of novel protein players involved in DNA replication and cellular transformation. *Nucleic Acids Res.* 38: 2314-2331.
- Sutinen, E.M., et al. 2012. Pro-inflammatory interleukin-18 increases Alzheimer's disease-associated amyloid- β production in human neuron-like cells. *J. Neuroinflammation* 9: 199.

RESEARCH USE

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

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 (H-260).