SANTA CRUZ BIOTECHNOLOGY, INC.

Fe65 (h2): 293T Lysate: sc-175239

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

γ-secretase cleaves the cell surface protein amyloid protein precursor (APP) at the transmembrane region into an extracelluar peptide (β-Amyloid) and an intracelluar 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.

REFERENCES

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3. 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.
4. Guenette, S.Y., et al. 1999. hFE65L influences amyloid precursor protein maturation and secretion. J. Neurochem. 73: 985-993.
5. Sabo, S.L., et al. 1999. Regulation of β-Amyloid secretion by Fe65, an amyloid protein precursor-binding protein. J. Biol. Chem. 274: 7952-7957.
6. Ando, K., et al. 2001. Phosphorylation-dependent regulation of the interaction of amyloid precursor protein with Fe65 affects the production of β-Amyloid. J. Biol. Chem. 276: 40353-40361.

CHROMOSOMAL LOCATION

Genetic locus: APBB1 (human) mapping to 11p15.4.

PRODUCT

Fe65 (h2): 293T Lysate represents a lysate of human Fe65 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Fe65 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Fe65 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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