



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

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

### BACKGROUND

$\gamma$ -secretase cleaves the cell surface protein amyloid protein precursor (APP) at the transmembrane region into an extracellular peptide ( $\beta$ -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  $\beta$ -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

1. Duilio, A., et al. 1991. A rat brain mRNA encoding a transcriptional activator homologous to the DNA binding domain of retroviral integrases. *Nucleic Acids Res.* 19: 5269-5274.
2. Bressler, S.L., et al. 1996. cDNA cloning and chromosome mapping of the human Fe65 gene: interaction of the conserved cytoplasmic domains of the human  $\beta$ -Amyloid precursor protein and its homologues with the mouse Fe65 protein. *Hum. Mol. Genet.* 5: 1589-1598.
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  $\beta$ -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  $\beta$ -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  $\mu$ g protein in 200  $\mu$ l 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  $\mu$ l 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  $-20^{\circ}$  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](http://www.scbt.com) for detailed protocols and support products.