



## Fe65L2 (P-15): sc-107215

### BACKGROUND

Fe65L2 (FE65-like protein 2), also known as SRA or APBB3 (amyloid  $\beta$  (A4) precursor protein-binding, family B, member 3), is a 486 amino acid protein that contains one WW domain and two PID domains. Binding to the intracellular domain of the  $\beta$ -Amyloid precursor protein, Fe65L2 is thought to modulate the internalization and, therefore, the accessibility and function of  $\beta$ -Amyloid. Via its ability to control the intracellular accumulation of  $\beta$ -Amyloid, Fe65L2 is thought to play a role in the pathogenesis of Alzheimer's disease. Fe65L2 exists as four alternatively spliced isoforms designated isoform I, isoform II, isoform III and isoform IV. Fe65L2 interacts with Amyloid-like protein and is encoded by a gene located on human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

### REFERENCES

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- Tanahashi, H. and Tabira, T. 1999. Genome structure and chromosomal mapping of the gene for Fe65L2 interacting with Alzheimer's  $\beta$ -Amyloid precursor protein. *Biochem. Biophys. Res. Commun.* 258: 385-389.
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- Bruni, P., et al. 2002. Fe65, a ligand of the Alzheimer's  $\beta$ -Amyloid precursor protein, blocks cell cycle progression by down-regulating thymidylate synthase expression. *J. Biol. Chem.* 277: 35481-35488.
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### STORAGE

Store at 4°C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### CHROMOSOMAL LOCATION

Genetic locus: APBB3 (human) mapping to 5q31.3; Apbb3 (mouse) mapping to 18 B2.

### SOURCE

Fe65L2 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Fe65L2 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107215 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

Fe65L2 (P-15) is recommended for detection of Fe65L2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family members Fe65L or APBB1P.

Suitable for use as control antibody for Fe65L2 siRNA (h): sc-91884, Fe65L2 siRNA (m): sc-145156, Fe65L2 shRNA Plasmid (h): sc-91884-SH, Fe65L2 shRNA Plasmid (m): sc-145156-SH, Fe65L2 shRNA (h) Lentiviral Particles: sc-91884-V and Fe65L2 shRNA (m) Lentiviral Particles: sc-145156-V.

Molecular Weight of Fe65L2: 50 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### 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) or our catalog for detailed protocols and support products.