

ZYMED[®] Laboratories

invitrogen immunodetection

Qty: 100µg/400 µL

Rabbit anti-Fe65

Catalog No. 38-4100

Lot No.

Rabbit anti-Fe65

FORM

This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is epitope-affinity purified from rabbit antiserum.

PAD: ZMD.374

IMMUNOGEN

Synthetic peptide derived from the N-terminal region of mouse Fe65

SPECIFICITY

This antibody reacts with the ~77 kDa mouse Fe65 protein. Cross reactivity with related proteins was not observed.

REACTIVITY

Reactivity has been confirmed in Western blotting with mouse brain homogenates. Immunoprecipitation assays using mouse brain homogenates did not yield positive results.

Sample	Western Blotting	Immunoprecipitation (native)
Mouse	+++	0*

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

*No reactivity observed under conditions tested.

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting: 1-3 µg/mL

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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BACKGROUND

Amyloid precursor protein (APP), which plays a central role in the pathogenesis of Alzheimer's disease (AD), is a cell-surface protein that is cleaved by γ -secretase at the transmembrane region into an extracellular amyloid-beta peptide (A β) and an intracellular tail fragment. This cytoplasmic tail of APP forms a multimeric complex with the nuclear adaptor protein Fe65 and the histone acetyltransferase Tip60.¹ Fe65 is an adaptor protein that bridges APP to certain molecular pathways. Fe65 is also highly expressed in neurons and possesses the characteristics of a transcription factor.² The interaction between APP and Fe65 increases the translocation of APP to the cell surface and the subsequent secretion of A β . Fe65 is thus important in the regulation and trafficking of APP.³

Low density lipoprotein receptor-related protein (LRP) also mediates APP processing and is involved with Alzheimer's disease pathogenesis by affecting A β and APP C-terminal fragment generation. A recent study has shown that Fe65 influences the LRP-mediated effect on APP processing by acting as a functional linker between APP and LRP.⁴

REFERENCES

1. Cao X, et al. *Science* 293(5527): 115-20, 2001.
2. Minopoli G, et al. *J Biol Chem* 276(9): 6545-6550, 2001.
3. King GD, et al. *Exp Neurol* 185(2): 208-19, 2004.
4. Pietrzik CU, et al. *J Neurosci* 24(17): 4259-65, 2004.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose [®] 4B	10-1041
rec-Protein G	Sepharose [®] 4B	10-1241

Conjugate	ZyMAX[™] Goat x Rabbit IgG (H+L)	ZyMAX[™] Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy [™] 3	81-6115	81-6515
Cy [™] 5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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