3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

Anti-Fe65
Developed in Rabbit
Affinity Isolated Antibody

Product Number **F 1429**

Product Description

Anti-Fe65 was developed in rabbit using a synthetic peptide corresponding to amino acid residues 352-369 from mouse Fe65 as the immunogen. The antibody was affinity isolated on immobilized immunogen.

Anti-Fe65 detects Fe65 from purified mouse samples. This antibody does not detect endogenous levels of Fe65. Anti-Fe65 has been successfully used in Western blot procedures. By Western blot, this antibody detects a 97 kDa protein representing Fe65 from immunopurified mouse brain lysate.

Fe65 has been implicated in a regulatory and cell signaling mechanism because it contains two different motifs involved in protein binding. It has been speculated that the binding of FE65 to amyloid precursor protein (APP) and low density lipoprotein receptor-related protein (LRP) somehow mediates APP processing.[1] The two distinct protein interaction domains of Fe65 interact with LRP and APP, respectively, raising the possibility that LRP can modulate the intracellular trafficking of APP.[2] Fe65 is predominantly expressed in the brain and in the regions most affected by Alzheimer's disease-associated neuropathology . Expression was high throughout the brain and particularly high in cortex, hippocampus, and cerebellum. FE65, like APP, is expressed at high levels in neurons, particularly in growth cones.[3]

Reagent

Anti-Fe65 is supplied as 100 µg of affinity isolated antibody (1 mg/ml) in phosphate buffered saline containing 1.0 mg/ml bovine serum albumin and 0.05% sodium azide as preservative.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling.

Storage/Stability

Store at –20 °C. For extended storage, freeze in working aliquots. Avoid repeated freezing and thawing. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

The recommended working dilution is 0.2 µg/ml for immunoblotting.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Pietrzik, C.U., et al., FE65 constitutes the functional link between the low-density lipoprotein receptor-related protein and the amyloid precursor protein, J Neurosci., **24,** 4259-4265 (2004).
2. Trommsdorff, M.**,** et al., Interaction of Cytosolic Adaptor Proteins with Neuronal Apolipoprotein E Receptors and the Amyloid Precursor Protein, J Biol Chem, **273**, 33556-33560 (1998)
3. Sabo,S.L., et al., The Amyloid Precursor Protein and Its Regulatory Protein, FE65, in Growth Cones and Synapses *In Vitro* and *In Vivo,* J. Neurosci, **23**, 5407-5415 (2003).

MCT/PHC 8/04