



APBB1 Polyclonal Antibody

Catalog No	YP-Ab-05314
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	APBB1 FE65 RIR
Immunogen	Synthesized peptide derived from human protein . at AA range: 400-480
Specificity	APBB1 Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	FE65;RIR;Protein Fe65;Amyloid-beta A4 precursor protein-binding family B member 1;APBB1;APBB1 FE65 RIR;Amyloid beta A4 precursor protein-binding family B member 1 (Protein Fe65)
Observed Band	65 kDa, 97 kDa
Calculated Molecular Weight	708 aa, 77 kDa
Cell Pathway	Cell membrane . Cytoplasm . Nucleus . Cell projection, growth cone . Nucleus speckle . Colocalizes with TSHZ3 in axonal growth cone (By similarity). Colocalizes with TSHZ3 in the nucleus (PubMed:19343227). In normal conditions, it mainly localizes to the cytoplasm, while a small fraction is tethered to the cell membrane via its interaction with APP (PubMed:18468999). Following exposure to DNA damaging agents, it is released from cell membrane and translocates to the nucleus (PubMed:18468999). Nuclear translocation is under the regulation of APP (PubMed:18468999). Colocalizes with NEK6 at the nuclear speckles (PubMed:17512906). Phosphorylation at Ser-610 by SGK1 promotes its localization to the nucleus (By similarity). .
Tissue Specificity	Highly expressed in brain; strongly reduced in post-mortem elderly subjects with Alzheimer disease. ; [Isoform 4]: Expressed preferentially in the brain.



Function

function:Adapter protein that forms a transcriptionally active complex with the gamma-secretase-derived amyloid precursor protein (APP) intracellular domain. Plays a central role in the response to DNA damage by translocating to the nucleus and inducing apoptosis. May act by specifically recognizing and binding histone H2AX phosphorylated on 'Tyr-142' (H2AXY142ph) at double-strand breaks (DSBs), recruiting other pro-apoptosis factors such as MAPK8/JNK1. Required for histone H4 acetylation at double-strand breaks (DSBs). Its ability to specifically bind modified histones and chromatin modifying enzymes such as HTATIP/TIP60, probably explains its transcription activation activity., PTM:Phosphorylated following nuclear translocation. Phosphorylation at Tyr-546 enhances the transcription activation activity and reduces the affinity with RASD1/DEXRAS1.,similarity:Contains 1 WW domain.,similarit

Background

amyloid beta precursor protein binding family B member 1 (APBB1) Homo sapiens The protein encoded by this gene is a member of the Fe65 protein family. It is an adaptor protein localized in the nucleus. It interacts with the Alzheimer's disease amyloid precursor protein (APP), transcription factor CP2/LSF/LBP1 and the low-density lipoprotein receptor-related protein. APP functions as a cytosolic anchoring site that can prevent the gene product's nuclear translocation. This encoded protein could play an important role in the pathogenesis of Alzheimer's disease. It is thought to regulate transcription. Also it is observed to block cell cycle progression by downregulating thymidylate synthase expression. Multiple alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Mar 2012],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images