

Anti-APBB1 antibody



Description	Unconjugated Rabbit polyclonal to APBB1
Model	STJ190544
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human APBB1 protein.
Immunogen Region	400-480aa
Gene ID	322
Gene Symbol	APBB1
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	APBB1 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Highly expressed in brain; strongly reduced in post-mortem elderly subjects with Alzheimer disease.
Purification	APBB1 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Amyloid-beta A4 precursor protein-binding family B member 1 Protein Fe65
Molecular Weight	78 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:581 OMIM:602709
Alternative Names	Amyloid-beta A4 precursor protein-binding family B member 1 Protein Fe65
Function	Transcription coregulator that can have both coactivator and corepressor functions. 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 KAT5/TIP60, probably explains its transcription activation activity. Function in association with TSHZ3, SET and HDAC factors as a transcriptional repressor, that inhibits the expression of CASP4. Associates with chromatin in a region surrounding the CASP4 transcriptional start site(s).
Cellular Localization	Cell membrane. Cytoplasm. Nucleus. Cell projection, growth cone Nucleus speckle. Colocalizes with TSHZ3 in axonal growth cone . In normal conditions, it mainly localizes to the cytoplasm, while a small fraction is tethered to the cell membrane via its interaction with APP. Following exposure to DNA damaging agents, it is released from cell membrane and translocates to the nucleus. Nuclear translocation is under the regulation of APP. Colocalizes with TSHZ3 in the nucleus. Colocalizes with NEK6 at the nuclear speckles. Phosphorylation at Ser-610 by SGK1 promotes its localization to the nucleus .
Post-translational Modifications	Phosphorylation at Ser-610 by SGK1 promotes its localization to the nucleus . Phosphorylated following nuclear translocation. Phosphorylation at Tyr-547 by ABL1 enhances transcriptional activation activity and reduces the affinity for RASD1/DEXRAS1.