

FE65 Antibody
Rabbit mAb
Catalog # AP92375

Specification

FE65 Antibody - Product Information

Application	WB, IHC, ICC
Primary Accession	O00213
Clonality	Monoclonal
Other Names	
APBB1; Protein Fe65; RIR;	

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	77244 Da

FE65 Antibody - Additional Information

Dilution	WB~~~1:1000 IHC~~~1:100~500 ICC~~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human FE65
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

FE65 Antibody - Protein Information

Name APBB1 ([HGNC:581](#))

Function

Transcription coregulator that can have both coactivator and corepressor functions (PubMed:15031292, PubMed:18468999, PubMed:18922798, PubMed:25342469, PubMed:<a

[33938178](http://www.uniprot.org/citations/33938178)). Adapter protein that forms a transcriptionally active complex with the gamma-secretase- derived amyloid precursor protein (APP) intracellular domain (PubMed:[15031292](http://www.uniprot.org/citations/15031292), PubMed:[18468999](http://www.uniprot.org/citations/18468999), PubMed:[18922798](http://www.uniprot.org/citations/18922798), PubMed:[25342469](http://www.uniprot.org/citations/25342469)). Plays a central role in the response to DNA damage by translocating to the nucleus and inducing apoptosis (PubMed:[15031292](http://www.uniprot.org/citations/15031292), PubMed:[18468999](http://www.uniprot.org/citations/18468999), PubMed:[18922798](http://www.uniprot.org/citations/18922798), PubMed:[25342469](http://www.uniprot.org/citations/25342469)). 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 (PubMed:[19234442](http://www.uniprot.org/citations/19234442)). Required for histone H4 acetylation at double-strand breaks (DSBs) (PubMed:[19234442](http://www.uniprot.org/citations/19234442)). Its ability to specifically bind modified histones and chromatin modifying enzymes such as KAT5/TIP60, probably explains its transcription activation activity (PubMed:[33938178](http://www.uniprot.org/citations/33938178)). Functions in association with TSHZ3, SET and HDAC factors as a transcriptional repressor, that inhibits the expression of CASP4 (PubMed:[19343227](http://www.uniprot.org/citations/19343227)). Associates with chromatin in a region surrounding the CASP4 transcriptional start site(s) (PubMed:[19343227](http://www.uniprot.org/citations/19343227)). Involved in hippocampal neurite branching and neuromuscular junction formation, as a result plays a role in spatial memory functioning (By similarity). Plays a role in the maintenance of lens transparency (By similarity). May play a role in muscle cell strength (By similarity). Acts as a molecular adapter that functions in neurite outgrowth by activating the RAC1-ARF6 axis upon insulin treatment (PubMed:[36250347](http://www.uniprot.org/citations/36250347)).

Cellular Location

Cell membrane. Cytoplasm. Nucleus. Cell projection, growth cone {ECO:0000250|UniProtKB:P46933}. Nucleus speckle. Note=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) {ECO:0000250|UniProtKB:P46933, ECO:0000269|PubMed:17512906, ECO:0000269|PubMed:18468999, ECO:0000269|PubMed:19343227}

Tissue Location

Highly expressed in brain; strongly reduced in post-mortem elderly subjects with Alzheimer disease

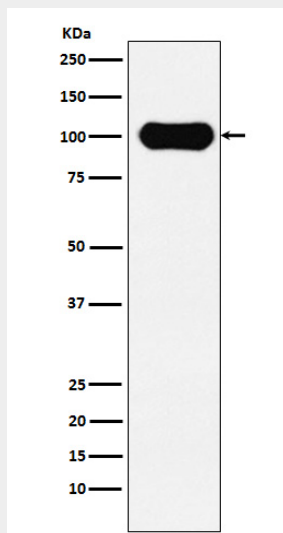
FE65 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FE65 Antibody - Images



Western blot analysis of FE65 expression in SH-SY5Y cell lysate.