

# FE65 Rabbit mAb

Catalog # AP76495

## Product Information

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Application	WB, IHC-P, IHC-F, ICC
Primary Accession	<a href="#">O00213</a>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	77244

## Additional Information

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Gene ID	322
Other Names	APBB1
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A ICC~~N/A
Format	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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Name	APBB1 ( <a href="#">HGNC:581</a> )
Function	<p>Transcription coregulator that can have both coactivator and corepressor functions (PubMed:<a href="#">15031292</a>, PubMed:<a href="#">18468999</a>, PubMed:<a href="#">18922798</a>, PubMed:<a href="#">25342469</a>, PubMed:<a href="#">33938178</a>). Adapter protein that forms a transcriptionally active complex with the gamma-secretase- derived amyloid precursor protein (APP) intracellular domain (PubMed:<a href="#">15031292</a>, PubMed:<a href="#">18468999</a>, PubMed:<a href="#">18922798</a>, PubMed:<a href="#">25342469</a>). Plays a central role in the response to DNA damage by translocating to the nucleus and inducing apoptosis (PubMed:<a href="#">15031292</a>, PubMed:<a href="#">18468999</a>, PubMed:<a href="#">18922798</a>, PubMed:<a href="#">25342469</a>). 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:<a href="#">19234442</a>). Required for histone H4 acetylation at double-strand breaks (DSBs) (PubMed:<a href="#">19234442</a>). Its ability to specifically bind modified histones and chromatin modifying enzymes such as KAT5/TIP60, probably explains its transcription activation activity (PubMed:<a href="#">33938178</a>). Functions in association with TSHZ3, SET and HDAC factors as a transcriptional repressor, that inhibits the expression of CASP4 (PubMed:<a href="#">19343227</a>). Associates with chromatin in a region surrounding the</p>

CASP4 transcriptional start site(s) (PubMed:[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](#)).

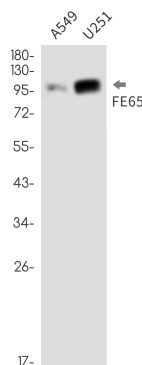
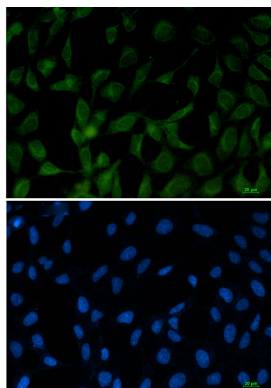
## Cellular Location

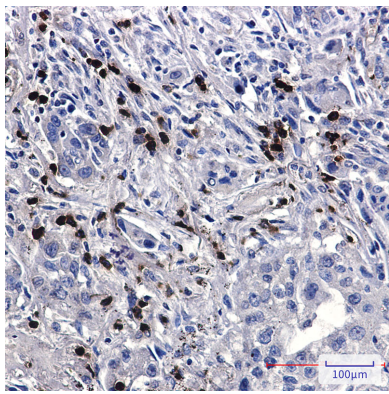
Cell membrane. Cytoplasm. Nucleus. Cell projection, growth cone {ECO:0000250|UniProtKB:P46933}. Nucleus speckle. Note=Colocalizes with TSHZ3 in axonal growth cone (By similarity). Colocalizes with TSHZ3 in the nucleus (PubMed:19343227). In normal conditions, it mainly localizes to the cytoplasm, while 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

## Images





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