

Product datasheet

Anti-FE65 antibody [EPR3538] ab91650

KO VALIDATED Recombinant RabMAb[®]

[4 References](#) [4 Images](#)

Overview

Product name	Anti-FE65 antibody [EPR3538]
Description	Rabbit monoclonal [EPR3538] to FE65
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human FE65 aa 650 to the C-terminus. The exact sequence is proprietary. Database link: O00213
Positive control	SH-SY5Y cell lysate and Human brain tissue
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR3538
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab91650 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

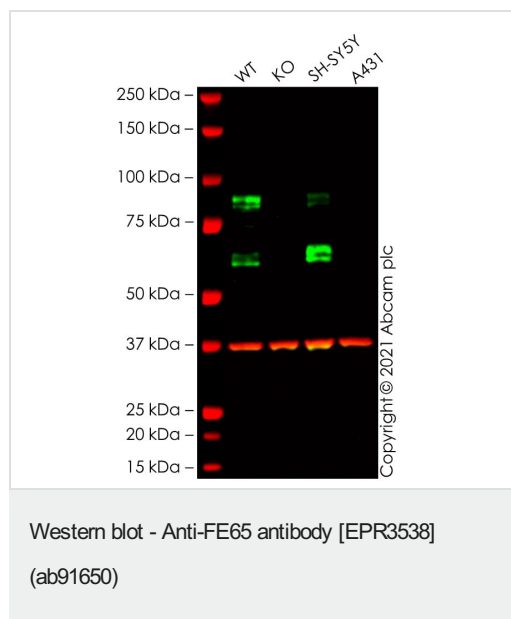
Application	Abreviews	Notes
WB		1/2000 - 1/5000. Predicted molecular weight: 77 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. The use of an HRP/AP polymerized antibody is recommended. We have compared both the HRP-conjugated and the polymerized HRP and found stronger signals can be obtained with the polymerized antibody.

Application notes Is unsuitable for Flow Cyt or IP.

Target

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).
Tissue specificity	Highly expressed in brain; strongly reduced in post-mortem elderly subjects with Alzheimer disease.
Sequence similarities	Contains 2 PID domains. Contains 1 WW domain.
Post-translational modifications	Phosphorylated following nuclear translocation. Phosphorylation at Tyr-546 enhances the transcription activation activity and reduces the affinity with RASD1/DEXRAS1.
Cellular localization	Cell membrane. Cytoplasm. Nucleus. Cell projection > growth cone. Colocalizes with TSHZ3 in axonal growth cone (By similarity). 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.

Images



All lanes : Anti-FE65 antibody [EPR3538] (ab91650) at 1/2000 dilution

Lane 1 : Wild-type HEK-293T cell lysate

Lane 2 : APBB1 knockout HEK-293T cell lysate

Lane 3 : SH-SY5Y cell lysate

Lane 4 : A431 cell lysate

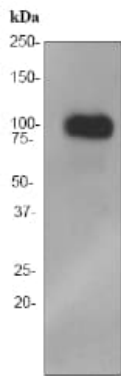
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 77 kDa

Observed band size: 65 kDa

False colour image of Western blot: Anti-FE65 antibody [EPR3538] staining at 1/2000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab91650 was shown to bind specifically to FE65. A band was observed at 65/85 kDa in wild-type HEK-293T cell lysates with no signal observed at this size in APBB1 knockout cell line [ab267294](#) (knockout cell lysate [ab257833](#)). To generate this image, wild-type and APBB1 knockout HEK-293T cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5% milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



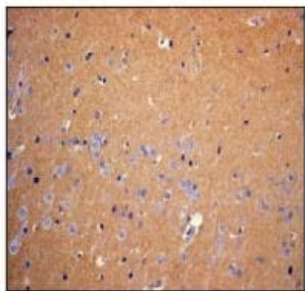
Western blot - Anti-FE65 antibody [EPR3538] (ab91650)

Anti-FE65 antibody [EPR3538] (ab91650) at 1/2000 dilution + SH-SY5Y cell lysates at 10 µg

Secondary

HRP labelled goat anti-rabbit IgG at 1/1000 dilution

Predicted band size: 77 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FE65 antibody [EPR3538] (ab91650)

ab91650, at 1/50 dilution, staining FE65 in formalin-fixed, paraffin-embedded Human brain tissue, by Immunohistochemistry.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-FE65 antibody [EPR3538] (ab91650)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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