

Product datasheet

Anti-CLSTN1 antibody [EPR2963] ab134130

Recombinant RabMAb

★★★★★ [2 Abreviews](#) [3 References](#) [5 Images](#)

Overview

Product name	Anti-CLSTN1 antibody [EPR2963]
Description	Rabbit monoclonal [EPR2963] to CLSTN1
Host species	Rabbit
Specificity	The immunogen used for this product shares 91% homology with CLSTN2. Cross-reactivity with this protein has not been confirmed experimentally.
Tested applications	Suitable for: WB, IHC-P, ICC/IF Unsuitable for: Flow Cyt or IP
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide within Human CLSTN1 (C terminal). The exact sequence is proprietary.
Positive control	Human fetal brain lysate; 293T cell lysate; U87 MG lysate; SH SY5Y lysate and Neuro 2a lysate
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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 <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant</p>

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2963
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab134130 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	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 110 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.

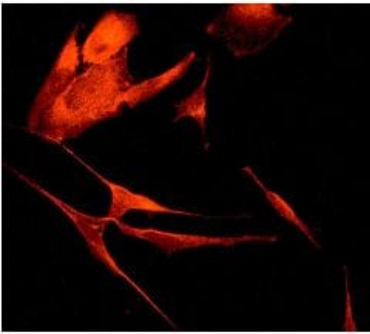
Application notes Is unsuitable for Flow Cyt or IP.

Target

Function	Induces KLC1 association with vesicles and functions as a cargo in axonal anterograde transport. Complex formation with APBA2 and APP, stabilizes APP metabolism and enhances APBA2-mediated suppression of beta-APP40 secretion, due to the retardation of intracellular APP maturation. In complex with APBA2 and C99, a C-terminal APP fragment, abolishes C99 interaction with PSEN1 and thus APP C99 cleavage by gamma-secretase, most probably through stabilization of the direct interaction between APBA2 and APP. The intracellular fragment AlciCD suppresses APBB1-dependent transactivation stimulated by APP C-terminal intracellular fragment (AICD), most probably by competing with AICD for APBB1-binding. May modulate calcium-mediated postsynaptic signals.
Tissue specificity	Expressed in the brain and, a lower level, in the heart, skeletal muscle, kidney and placenta. Accumulates in dystrophic neurites around the amyloid core of Alzheimer disease senile plaques (at protein level).
Sequence similarities	Contains 2 cadherin domains.
Domain	The cytoplasmic domain is involved in interaction with APBA2, as well as the binding of synaptic Ca(2+).
Post-translational modifications	Proteolytically processed under normal cellular conditions. A primary zeta-cleavage generates a large extracellular (soluble) N-terminal domain (sAlc) and a short C-terminal transmembrane fragment (CTF1). A secondary cleavage catalyzed by presenilin gamma-secretase within the transmembrane domain releases the beta-Alc-alpha chain in the extracellular milieu and produces an intracellular fragment (AlciCD). This processing is strongly suppressed in the tripartite complex formed with APBA2 and APP, which seems to prevent the association with PSEN1.
Cellular localization	Endoplasmic reticulum membrane. Golgi apparatus membrane. Cell projection. Cell junction > synapse > postsynaptic cell membrane. Nucleus. Neurite tips. Localized in the postsynaptic membrane of both excitatory and inhibitory synapses (By similarity). The AlciCD fragment is

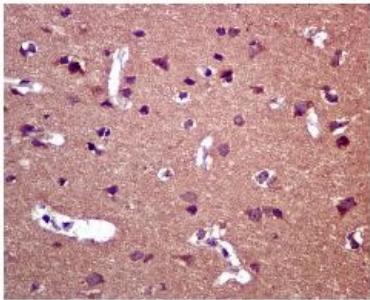
translocated to the nucleus upon interaction with APBB1.

Images



Immunocytochemistry/ Immunofluorescence - Anti-CLSTN1 antibody [EPR2963] (ab134130)

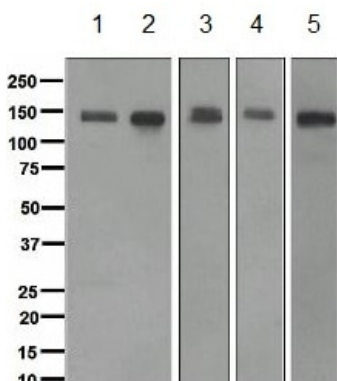
Immunofluorescent staining of paraffin embedded Human SH SY 5Y cells labelling CLSTN1 with ab134130 at 1/100 dilution



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLSTN1 antibody [EPR2963] (ab134130)

Immunohistochemical analysis of paraffin embedded Human brain tissue labelling CLSTN1 with ab134130 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-CLSTN1 antibody [EPR2963] (ab134130)

All lanes : Anti-CLSTN1 antibody [EPR2963] (ab134130) at 1/1000 dilution

Lane 1 : Human fetal brain lysate

Lane 2 : 293T cell lysate

Lane 3 : U87 MG lysate

Lane 4 : SH SY5Y lysate

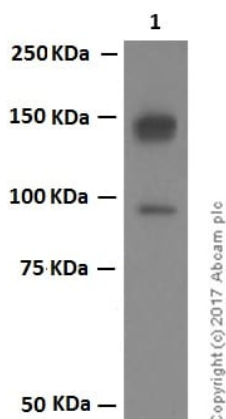
Lane 5 : Neuro 2a lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti mouse at 1/2000 dilution

Predicted band size: 110 kDa



Western blot - Anti-CLSTN1 antibody [EPR2963] (ab134130)

Anti-CLSTN1 antibody [EPR2963] (ab134130) at 1/200000 dilution
+ Human fetal brain tissue lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 110 kDa

Observed band size: 150 kDa

Exposure time: 3 minutes

Blocking and diluting buffer: 5% NFDM/TBST

Extra band at: 90kDa We are unsure as to the identity of this extra band.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-CLSTN1 antibody [EPR2963] (ab134130)

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

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