abcam

Product datasheet

Anti-Clusterin antibody ab69644

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Overview

Product name Anti-Clusterin antibody

Description Rabbit polyclonal to Clusterin

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, ICC/IF

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide corresponding to Human Clusterin (C terminal).

Positive control HeLa and A549 cell extracts, HeLa cells and human brain tissue.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS

Without Mg2+ and Ca2+

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

1

The Abpromise quarantee

Our **Abpromise guarantee** covers the use of ab69644 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		1/500 - 1/1000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).
IHC-P	*** <u>*</u> (2)	1/50 - 1/100.
ICC/IF		1/500 - 1/1000.

Target

Function

Isoform 1 functions as extracellular chaperone that prevents aggregation of nonnative proteins. Prevents stress-induced aggregation of blood plasma proteins. Inhibits formation of amyloid fibrils by APP, APOC2, B2M, CALCA, CSN3, SNCA and aggregation-prone LYZ variants (in vitro). Does not require ATP. Maintains partially unfolded proteins in a state appropriate for subsequent refolding by other chaperones, such as HSPA8/HSC70. Does not refold proteins by itself. Binding to cell surface receptors triggers internalization of the chaperone-client complex and subsequent lysosomal or proteasomal degradation. Secreted isoform 1 protects cells against apoptosis and against cytolysis by complement. Intracellular isoforms interact with ubiquitin and SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes and promote the ubiquitination and subsequent proteasomal degradation of target proteins. Promotes proteasomal degradation of COMMD1 and IKBKB. Modulates NF-kappa-B transcriptional activity. Nuclear isoforms promote apoptosis. Mitochondrial isoforms suppress BAX-dependent release of cytochrome c into the cytoplasm and inhibit apoptosis. Plays a role in the regulation of cell proliferation.

Tissue specificity

Detected in blood plasma, cerebrospinal fluid, milk, seminal plasma and colon mucosa. Detected in the germinal center of colon lymphoid nodules and in colon parasympathetic ganglia of the Auerbach plexus (at protein level). Ubiquitous. Detected in brain, testis, ovary, liver and pancreas, and at lower levels in kidney, heart, spleen and lung.

Sequence similarities

Belongs to the clusterin family.

Post-translational modifications

lsoform 1 is proteolytically cleaved on its way through the secretory system, probably within the Golgi lumen.

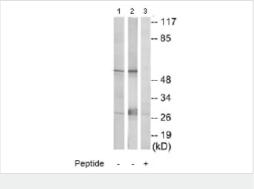
Polyubiquitinated, leading to proteasomal degradation.

Heavily N-glycosylated. About 30% of the protein mass is comprised of complex N-linked carbohydrate.

Cellular localization

Secreted. Can retrotranslocate from the secretory compartments to the cytosol upon cellular stress and Nucleus. Cytoplasm. Mitochondrion membrane. Cytoplasm, cytosol. Microsome. Endoplasmic reticulum. Cytoplasmic vesicle, secretory vesicle, chromaffin granule. Isoforms lacking the N-terminal signal sequence have been shown to be cytoplasmic and/or nuclear. Secreted isoforms can retrotranslocate from the secretory compartments to the cytosol upon cellular stress. Detected in perinuclear foci that may be aggresomes containing misfolded, ubiquitinated proteins. Detected at the mitochondrion membrane upon induction of apoptosis.

Images



Western blot - Anti-Clusterin antibody (ab69644)

All lanes: Anti-Clusterin antibody (ab69644) at 1/500 dilution

Lane 1: HeLa cell extracts

Lane 2: A549 extracts

Lane 3: A549 extracts with immunising peptide at 10 μg

Lysates/proteins at 30 µg per lane.

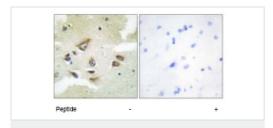
Predicted band size: 52 kDa Observed band size: 52 kDa

Additional bands at: 28 kDa. We are unsure as to the identity of

these extra bands.



Immunocytochemistry/ Immunofluorescence - Anti-Clusterin antibody (ab69644) ab69644 at 1/500 dilution staining Apolipoprotein J in HeLa cells by Immunofluorescence, in the absence or presence of the immunising peptide.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Clusterin antibody (ab69644)

ab69644 at 1/50 dilution staining Apolipoprotein J in human brain by Immunohistochemistry, Paraffin-embedded tissue, in the absence or presence of the immunising peptide.

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