

Product Name: Clusterin (16Y5) Rabbit Monoclonal Antibody
Catalog #: AMRe09072



Summary

Production Name	Clusterin (16Y5) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	CLU
Alternative Names	CLI; AAG4; APOJ; CLU1; CLU2; KUB1; SGP2; APO-J; SGP-2; SP-40;TRPM2; TRPM-2; NA1/NA2;
Gene ID	1191.0
SwissProt ID	P10909.

Application

Dilution Ratio	WB 1:500-1:2000
Molecular Weight	52kDa

Background

Clusterin (CLU, apolipoprotein J) is a multifunctional glycoprotein that is expressed ubiquitously in most tissues. Clusterin functions as a secreted chaperone protein that interacts with and stabilizes stress-induced proteins to prevent their precipitation. Research studies show that clusterin plays a protective role in Alzheimer's disease by sequestering amyloid β (1-40) peptides to form long-lived, stable complexes, which prevents amyloid fibril formation. [Isoform 1]: Functions as extracellular chaperone that prevents aggregation of non native proteins (PubMed: 11123922, PubMed: 19535339). Prevents stress-induced aggregation of blood plasma proteins (PubMed: 11123922, PubMed: 12176985, PubMed: 17260971, PubMed: 19996109). Inhibits formation of amyloid fibrils by APP, APOC2, B2M, CALCA, CSN3, SNCA and aggregation-prone LYZ variants (in vitro) (PubMed: 12047389, PubMed: 17412999, PubMed: 17407782). Does not require ATP (PubMed: 11123922). Maintains partially unfolded proteins in a state appropriate for subsequent refolding by other chaperones, such as HSPA8/HSC70 (PubMed: 11123922). Does not refold proteins by itself (PubMed: 11123922). Binding to cell surface receptors triggers internalization of the chaperone-client complex and subsequent lysosomal or proteasomal degradation (PubMed: 21505792). Protects cells against apoptosis and against cytolysis by complement (PubMed: 2780565). Intracellular forms 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 (PubMed: 20068069). Promotes proteasomal degradation of COMMD1 and IKBKB (PubMed: 20068069). Modulates NF-kappa-B transcriptional activity (PubMed: 12882985). A mitochondrial form suppresses BAX- dependent release of cytochrome c into the cytoplasm and inhibit apoptosis (PubMed: 16113678, PubMed: 17689225). Plays a role in the regulation of cell proliferation (PubMed: 19137541). An intracellular form suppresses stress-induced apoptosis by stabilizing mitochondrial membrane integrity through interaction

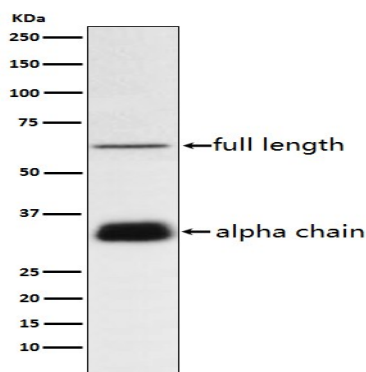
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with HSPA5 (PubMed:22689054). Secreted form does not affect caspase or BAX-mediated intrinsic apoptosis and TNF-induced NF-kappa-B-activity (PubMed:24073260). Secreted form act as an important modulator during neuronal differentiation through interaction with STMN3 (By similarity). Plays a role in the clearance of immune complexes that arise during cell injury (By similarity).

Research Area

Image Data



Western blot analysis of Clusterin expression in human plasma lysate.

Note

For research use only.