

Clusterin- α (M-18): sc-6420

BACKGROUND

Clusterin, also designated complement lysis inhibitor (CLI), apolipoprotein J (APOJ), sulfated glycoprotein 2 (SGP2), SP-40 and testosterone-repressed prostate message 2 (TRPM2), is a secretory, heterodimeric glycoprotein that influences immune regulation, cell adhesion, transformation, lipid transportation, tissue remodeling, membrane recycling and cell-cell interactions. Clusterin is synthesized as a 449 amino acid poly-peptide that is posttranslationally cleaved at an internal bond between Arg 227 and Ser 228. Two subunits, α and β , are associated through disulfide bonds. The β subunit (also called ApoJ α) corresponds to residues 23-227. The α subunit (also called ApoJ β) corresponds to residues 228-449. Overexpression of Clusterin appears to be more common in late stages of mammary tumor progression. Clusterin markedly influences β -Amyloid structure and neuritic toxicity *in vivo* and may influence Alzheimer's disease pathogenesis.

CHROMOSOMAL LOCATION

Genetic locus: CLU (human) mapping to 8p21.1; Clu (mouse) mapping to 14 D1.

SOURCE

Clusterin- α (M-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Clusterin- α of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6420 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Clusterin- α (M-18) is recommended for detection of Clusterin- α of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Clusterin precursor: 70 kDa.

Molecular Weight of Clusterin- α : 36-39 kDa.

Molecular Weight of Clusterin- β : 34-36 kDa.

Positive Controls: Clusterin (h3): 293T Lysate: sc-170210, rat testis extract: sc-2400 or SK-BR-3 cell lysate: sc-2218.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

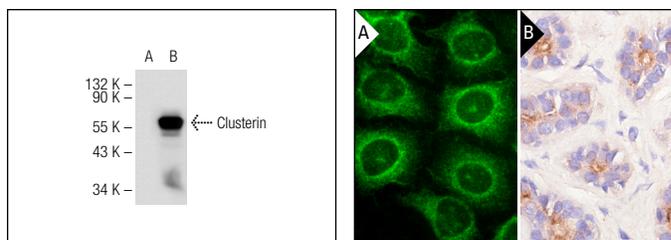
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



Clusterin- α (M-18): sc-6420. Western blot analysis of Clusterin expression in non-transfected: sc-117752 (A) and human Clusterin transfected: sc-170210 (B) 293T whole cell lysates.

Clusterin- α (M-18): sc-6420. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast tumor showing cytoplasmic staining (B).

SELECT PRODUCT CITATIONS

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- Omwancha, J., et al. 2009. Differential age-associated regulation of clusterin expression in prostate lobes of brown Norway rats. *Prostate* 69: 115-125.
- Kim, H.J., et al. 2009. Protective role of clusterin/apolipoprotein J against neointimal hyperplasia via antiproliferative effect on vascular smooth muscle cells and cytoprotective effect on endothelial cells. *Arterioscler. Thromb. Vasc. Biol.* 29: 1558-1564.
- Kuliková, L., et al. 2010. NF κ B is not directly responsible for photoresistance induced by fractionated light delivery in HT-29 colon adenocarcinoma cells. *Photochem. Photobiol.* 86: 1285-1293.
- Kögel, D., et al. 2011. The APP intracellular domain (AICD) potentiates ER stress-induced apoptosis. *Neurobiol. Aging* 33: 2200-2209.
- Shim, Y.J., et al. 2011. Clusterin induces matrix metalloproteinase-9 expression via ERK1/2 and PI3K/Akt/NF κ B pathways in monocytes/macrophages. *J. Leukoc. Biol.* 90: 761-769.



Try **Clusterin- α (B-5): sc-5289** or **Clusterin- α (A-11): sc-166831**, our highly recommended monoclonal alternatives to Clusterin- α (M-18). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Clusterin- α (B-5): sc-5289**.