

Clusterin (H-330): sc-8354

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 (H-330) is a rabbit polyclonal antibody raised against amino acids 120-449 mapping at the C-terminus of Clusterin of human origin.

PRODUCT

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

APPLICATIONS

Clusterin (H-330) is recommended for detection of Clusterin 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).

Suitable for use as control antibody for Clusterin siRNA (h): sc-43688, Clusterin siRNA (m): sc-43689, Clusterin shRNA Plasmid (h): sc-43688-SH, Clusterin shRNA Plasmid (m): sc-43689-SH, Clusterin shRNA (h) Lentiviral Particles: sc-43688-V and Clusterin shRNA (m) Lentiviral Particles: sc-43689-V.

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 or HeLa whole cell lysate: sc-2200.

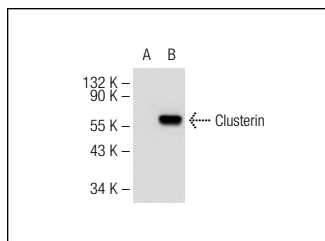
STORAGE

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

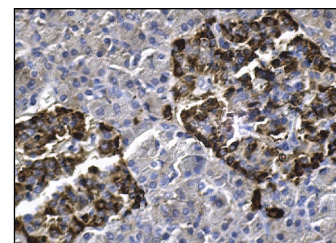
RESEARCH USE

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

DATA



Clusterin (H-330): sc-8354. Western blot analysis of Clusterin expression in non-transfected: sc-117752 (A) and human Clusterin transfected: sc-170210 (B) 293T whole cell lysates.



Clusterin (H-330): sc-8354. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans cells.

SELECT PRODUCT CITATIONS

- Leskov, K.S., et al. 2003. Synthesis and functional analyses of nuclear Clusterin, a cell death protein. *J. Biol. Chem.* 278: 11590-11600.
- Debure, L., et al. 2003. Intracellular clusterin causes juxtannuclear aggregate formation and mitochondrial alteration. *J Cell Sci.* 116: 3109-3121.
- Korshunov, A., et al. 2003. Gene expression patterns in ependymomas correlate with tumor location, grade, and patient age. *Am. J. Pathol.* 163: 1721-1727.
- Tuncdemir, M., et al. 2008. The effects of ACE inhibitor and angio-tensin receptor blocker on Clusterin and apoptosis in the kidney tissue of streptozotocin-diabetic rats. *J. Mol. Histol.* 39: 605-616.
- Ekici, A.I., et al. 2008. Clusterin expression in non-neoplastic adenohypophyses and pituitary adenomas: cytoplasmic clusterin localization in adenohypophysis is related to aging. *Endocr. Pathol.* 19: 47-53.
- Shimada, A., et al. 2008. Limbic structures are prone to age-related impairments in proteasome activity and neuronal ubiquitinated inclusions in SAMP10 mouse: a model of cerebral degeneration. *Neuropathol. Appl. Neurobiol.* 34: 33-51.
- Pucci, S., et al. 2009. Interleukin-6 affects cell death escaping mechanisms acting on Bax-Ku70-Clusterin interactions in human colon cancer progression. *Cell Cycle* 8: 473-481.
- Okada, N., et al. 2011. Clusterin promotes corneal epithelial cell growth through upregulation of hepatocyte growth factor by mesenchymal cells *in vitro*. *Invest. Ophthalmol. Vis. Sci.* 52: 2905-2910.



Try **Clusterin (A-9): sc-166907** or **Clusterin- α (B-5): sc-5289**, our highly recommended monoclonal alternatives to Clusterin (H-330). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Clusterin (A-9): sc-166907**.