

Clusterin- α (78E): sc-32264

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 polypeptide that is post-translationally 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.

REFERENCES

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- Gwon, J.S., et al. 2004. Expression of Clusterin in Muller cells of the rat retina after pressure-induced ischemia. *Glia* 47: 35-45.
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- Xie, D., et al. 2005. Up-regulated expression of cytoplasmic Clusterin in human ovarian carcinoma. *Cancer* 103: 277-283.
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CHROMOSOMAL LOCATION

Genetic locus: CLU (human) mapping to 8p21.1.

SOURCE

Clusterin- α (78E) is a mouse monoclonal antibody raised against native Clusterin- α purified from serum of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Clusterin- α (78E) is recommended for detection of Clusterin- α of 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

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

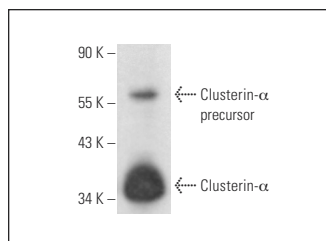
Molecular Weight of Clusterin precursor: 70 kDa.

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

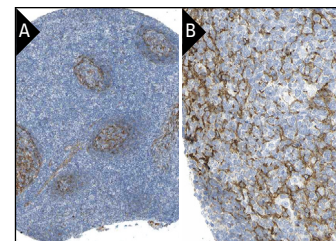
Molecular Weight of Clusterin- β : 34-36 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218, human tonsil tissue extract: sc-364263 or HeLa whole cell lysate: sc-2200.

DATA



Clusterin- α (78E): sc-32264. Western blot analysis of Clusterin- α expression in human tonsil tissue extract.



Clusterin- α (78E): sc-32264. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing membrane staining of squamous epithelial cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

- Zhang, Y., et al. 2016. Cr(VI) induces premature senescence through Ros-mediated p53 pathway in L-02 hepatocytes. *Sci. Rep.* 6: 34578.

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.



See **Clusterin- α (B-5): sc-5289** for Clusterin- α antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.