

Clathrin HC (H-300): sc-9069

BACKGROUND

Clathrin is a major cytosolic coat protein in pits and vesicles originating from the plasma membrane and the *trans*-Golgi network. In receptor-mediated endocytosis, receptor proteins are captured by Clathrin-coated vesicles. Clathrin is composed of three heavy chains and three light chains which associate non-covalently to form a triskelion structure. Clathrin heavy chain is a 192 kDa protein composed of a terminal globular domain, a distal segment and a proximal segment containing a light chain binding site. The proximal segment of the clathrin heavy chain protein is essential for interactions between Clathrin heavy chains and light chains which result in the formation of the triskelion structure.

CHROMOSOMAL LOCATION

Genetic locus: CLTC (human) mapping to 17q23.1; Cltc (mouse) mapping to 11 C.

SOURCE

Clathrin HC (H-300) is a rabbit polyclonal antibody raised against amino acids 1321-1620 of Clathrin HC of human origin.

PRODUCT

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

Available as TransCruz reagent for ChIP application, sc-9069 X, 200 µg/0.1 ml.

APPLICATIONS

Clathrin HC (H-300) is recommended for detection of clathrin heavy chain of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Clathrin HC (H-300) is also recommended for detection of clathrin heavy chain in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Clathrin HC siRNA (h): sc-35067, Clathrin HC siRNA (m): sc-35066, Clathrin HC shRNA Plasmid (h): sc-35067-SH, Clathrin HC shRNA Plasmid (m): sc-35066-SH, Clathrin HC shRNA (h) Lentiviral Particles: sc-35067-V and Clathrin HC shRNA (m) Lentiviral Particles: sc-35066-V.

Clathrin HC (H-300) X TransCruz antibody is recommended for ChIP assays.

Molecular Weight of Clathrin HC: 192 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or KNRK whole cell lysate: sc-2214.

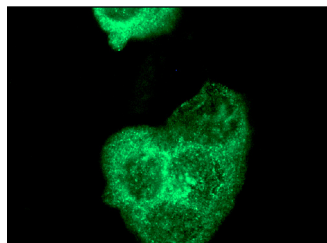
RESEARCH USE

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

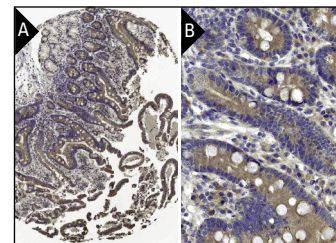
STORAGE

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

DATA



Clathrin HC (H-300): sc-9069. Immunofluorescence staining of methanol-fixed A-431 cells showing cytoplasmic localization.



Clathrin HC (H-300): sc-9069. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

- Hill, K., et al. 2003. Munc18 interacting proteins: ADP-ribosylation factor-dependent coat proteins that regulate the traffic of β -Alzheimer's precursor protein. *J. Biol. Chem.* 278: 36032-36040.
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- Ravindran, S., et al. 2008. Endoplasmic reticulum chaperone protein GRP-78 mediates endocytosis of dentin matrix protein 1. *J. Biol. Chem.* 283: 29658-29670.
- Mao, H., et al. 2009. Influenza virus directly infects human natural killer cells and induces cell apoptosis. *J. Virol.* 83: 9215-9222.
- Flynn, P.G., et al. 2010. Non-muscle myosin IIB helps mediate TNF cell death signaling independent of actomyosin contractility (AMC). *J. Cell. Biochem.* 110: 1365-1375.
- Shi, Q., et al. 2011. Protective effects of glycyrrhizin against β_2 -adrenergic receptor agonist-induced receptor internalization and cell apoptosis. *Biol. Pharm. Bull.* 34: 609-617.
- Raposo, R.A., et al. 2011. Proteomic-based identification of CD4-interacting proteins in human primary macrophages. *PLoS ONE* 6: e18690.
- Lunov, O., et al. 2011. Modeling receptor-mediated endocytosis of polymer-functionalized iron oxide nanoparticles by human macrophages. *Biomaterials* 32: 547-555.



Try **Clathrin HC (TD.1): sc-12734** or **Clathrin HC (A-8): sc-271178**, our highly recommended monoclonal alternatives to Clathrin HC (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Clathrin HC (TD.1): sc-12734**.