

Clathrin HC (C-20): sc-6579

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 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 HC 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 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus 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.

Blocking peptide available for competition studies, sc-6579 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as fluorescein (sc-6579 FITC) or rhodamine (sc-6579 TRITC) conjugates for immunofluorescence, 200 µg/1 ml.

APPLICATIONS

Clathrin HC (C-20) is recommended for detection of Clathrin HC 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 (N-19) is also recommended for detection of Clathrin HC 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.

Molecular Weight of Clathrin HC: 192 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, A-431 whole cell lysate: sc-2201 or SH-SY5Y cell lysate: sc-3812.

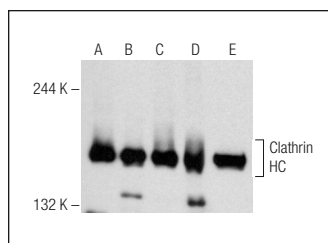
STORAGE

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

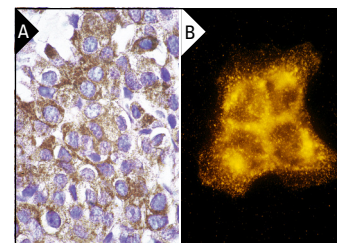
RESEARCH USE

For research use only, not for use in diagnostic procedures

DATA



Clathrin HC (C-20): sc-6579. Western blot analysis of Clathrin HC expression in Jurkat (A), A-431 (B), SH-SY5Y (C) and U-2 OS (D) whole cell lysates and human testis tissue extract (E).



Clathrin HC (C-20): sc-6579. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue (A) and rhodamine immunofluorescence staining of methanol-fixed A-431 cells (B) showing localized staining within the cytoplasm.

SELECT PRODUCT CITATIONS

1. Raiborg, C., et al. 2001. Hrs recruits Clathrin to early endosomes. *EMBO J.* 20: 5008-5021.
2. Chao, W.T. and Kunz, J. 2009. Focal adhesion disassembly requires clathrin-dependent endocytosis of integrins. *FEBS Lett.* 583: 1337-1343.
3. Saovapakhiran, A., et al. 2009. Surface modification of PAMAM dendrimers modulates the mechanism of cellular internalization. *Bioconjug. Chem.* 20: 693-701.
4. Carrasco, M.P., et al. 2010. Disruption of cellular cholesterol transport and homeostasis as a novel mechanism of action of membrane-targeted alkylphospholipid analogues. *Br. J. Pharmacol.* 160: 355-366.
5. Rostomily, R.C., et al. 2010. Quantitative proteomic analysis of oligodendroglomas with and without 1p/19q deletion. *J. Proteome Res.* 9: 2610-2618.
6. Takahashi, K., et al. 2010. Suppression of dynamin GTPase activity by sertraline leads to inhibition of dynamin-dependent endocytosis. *Biochem. Biophys. Res. Commun.* 391: 382-387.
7. Fort, A.G., et al. 2011. *In vitro* motility of liver connexin vesicles along microtubules utilizes kinesin motors. *J. Biol. Chem.* 286: 22875-22885.
8. Lowther, K.M., et al. 2011. Endocytosis in the mouse oocyte and its contribution to cAMP signaling during meiotic arrest. *Reproduction* 141: 737-747.
9. Armstrong, S.M., et al. 2012. Co-regulation of transcellular and paracellular leak across microvascular endothelium by dynamin and Rac. *Am. J. Pathol.* 180: 1308-1323.



Try **Clathrin HC (TD.1): sc-12734** or **Clathrin HC (A-8): sc-271178**, our highly recommended monoclonal alternatives to Clathrin HC (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Clathrin HC (TD.1): sc-12734**.