

Clathrin LCB (H-60): sc-28277

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 engulfed 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 light chain regulates the self-assembly of triskelions onto intracellular membranes. Clathrin light chain subunits (LCA and LCB) contribute to regulation of coated vesicle formation to sort proteins during receptor-mediated endocytosis and organelle biogenesis. Although LCA and LCB are encoded by two discrete genes sharing only 60% homology, they have certain features in common. Both LCA and LCB undergo alternative mRNA splicing, which results in the generation of tissue-specific isoforms. Additionally, in the brain, LCA and LCB contain inserted sequences that form higher molecular weight isoforms. These sequences insert at similar cytoplasmic domain encoding regions for both LCA and LCB.

CHROMOSOMAL LOCATION

Genetic locus: CLTB (human) mapping to 5q35.2; Cltb (mouse) mapping to 13 B1.

SOURCE

Clathrin LCB (H-60) is a rabbit polyclonal antibody raised against amino acids 41-100 mapping within an internal region of Clathrin LCB 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.

APPLICATIONS

Clathrin LCB (H-60) is recommended for detection of Clathrin LCB 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 LCB (H-60) is also recommended for detection of Clathrin LCB in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Clathrin LCB siRNA (h): sc-37025, Clathrin LCB siRNA (m): sc-37024, Clathrin LCB shRNA Plasmid (h): sc-37025-SH, Clathrin LCB shRNA Plasmid (m): sc-37024-SH, Clathrin LCB shRNA (h) Lentiviral Particles: sc-37025-V and Clathrin LCB shRNA (m) Lentiviral Particles: sc-37024-V.

Molecular Weight (predicted) of Clathrin LCB: 25 kDa.

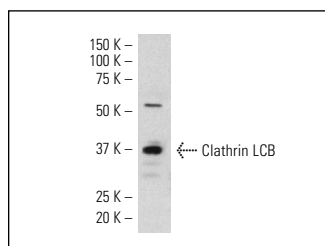
Molecular Weight (observed) of Clathrin LCB: 32-37 kDa.

Positive Controls: mouse brain extract: sc-2253 or mouse eye extract: sc-364241.

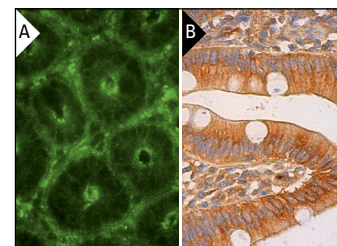
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Clathrin LCB (H-60): sc-28277. Western blot analysis of Clathrin LCB expression in mouse eye tissue extract.



Clathrin LCB (H-60): sc-28277. Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic and membrane staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Kolokoltsov, A.A., et al. 2007. Small interfering RNA profiling reveals key role of clathrin-mediated endocytosis and early endosome formation for infection by respiratory syncytial virus. *J. Virol.* 81: 7786-7800.

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.

PROTOCOLS

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



Try **Clathrin LCB (G-7): sc-376414**, our highly recommended monoclonal alternative to Clathrin LCB (H-60).