

Clathrin LCB (E-12): sc-32519

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 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Clathrin LCB of rat 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-32519 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Clathrin LCB (E-12) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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 LCA isoforms: 27/24 kDa.

Molecular Weight (predicted) of Clathrin LCB isoforms: 25/23 kDa.

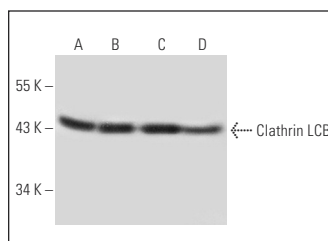
Molecular Weight (observed) of Clathrin LCB: 31-44 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237, DU 145 cell lysate: sc-2268 or IMR-32 cell lysate: sc-2409.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Clathrin LCB (E-12): sc-32519. Western blot analysis of Clathrin LCB expression in SK-N-MC (A), DU 145 (B), IMR-32 (C) and T98G (D) whole cell lysates.

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.

MONOS
Satisfaction
Guaranteed

Try **Clathrin LCB (G-7): sc-376414**, our highly recommended monoclonal alternative to Clathrin LCB (E-12).