

Cappuccino (C-13): sc-46823

BACKGROUND

Biogenesis of lysosome-related organelles complex-1 (BLOC-1) is a multisubunit protein necessary for biogenesis of specialized organelles of the endosomal-lysosomal system (such as melanosomes and platelet-dense granules). The complex consists of coiled-coil-forming proteins Snapin, Pallidin, Cappuccino, Muted, BLOS1, BLOS2 and BLOS3. The localization of these proteins varies, as they can be cytoplasmic, peripheral membrane-bound or anchored to the vesicular membrane. Cappuccino, a primarily cytoplasmic protein, plays a role in the development of melanosomes, platelet-dense granules and other lysosome-related organelles. It interacts primarily with Pallidin and Muted and has been implicated as an Actin-nucleation factor that may play a role in crosstalk between microfilaments and microtubules.

REFERENCES

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- Ciciotte, S.L., et al. 2003. Cappuccino, a mouse model of Hermansky-Pudlak syndrome, encodes a novel protein that is part of the Pallidin-Muted complex (BLOC-1). *Blood* 101: 4402-4407.
- Gwynn, B., et al. 2004. Reduced pigmentation (rp), a mouse model of Hermansky-Pudlak syndrome, encodes a novel component of the BLOC-1 complex. *Blood* 104: 3181-3189.
- Bossi, G., et al. 2005. Normal lytic granule secretion by cytotoxic T lymphocytes deficient in BLOC-1, -2 and -3 and Myosins Va, VIIa and XV. *Traffic* 6: 243-251.
- Quinlan, M.E., et al. 2005. *Drosophila* Spire is an Actin nucleation factor. *Nature* 433: 382-388.
- Rosales-Nieves, A.E., et al. 2006. Coordination of microtubule and microfilament dynamics by *Drosophila* Rho 1, Spire and Cappuccino. *Nat. Cell Biol.* 8: 367-376.

CHROMOSOMAL LOCATION

Genetic locus: CNO (human) mapping to 4p16.1; Cno (mouse) mapping to 5 B3.

SOURCE

Cappuccino (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Cappuccino 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-46823 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Cappuccino (C-13) is recommended for detection of Cappuccino 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 Cappuccino siRNA (h): sc-60324, Cappuccino siRNA (m): sc-60325, Cappuccino shRNA Plasmid (h): sc-60324-SH, Cappuccino shRNA Plasmid (m): sc-60325-SH, Cappuccino shRNA (h) Lentiviral Particles: sc-60324-V and Cappuccino shRNA (m) Lentiviral Particles: sc-60325-V.

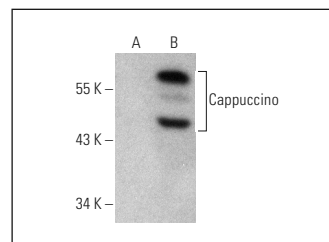
Molecular Weight of Cappuccino: 32 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or mouse Cappuccino transfected CHO whole cell lysate.

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



Cappuccino (C-13): sc-46823. Western blot analysis of Cappuccino expression in non-transfected CHO (A) and mouse Cappuccino transfected CHO (B) whole cell lysates.

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.