

Cappuccino (S-5): sc-100683

BACKGROUND

Biogenesis of lysosome-related organelles complex-1 (BLOC-1) is a multi-subunit 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

- Li, W., et al. 2003. Hermansky-Pudlak syndrome type 7 (HPS-7) results from mutant dysbindin, a member of the biogenesis of lysosome-related organelles complex 1 (BLOC-1). *Nat Genet.* 35: 84-89.
- Cicotte, 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.
- Rosales-Nieves, AE. et al. 2006. Coordination of microtubule and microfilament dynamics by *Drosophila* Rho1, Spire and Cappuccino. *Nat. Cell Biol.* 8: 367-376.
- Quinlan, ME. et al. 2005. *Drosophila* Spire is an Actin nucleation factor. *Nature* 433: 382-388.

CHROMOSOMAL LOCATION

Genetic locus: CNO (human) mapping to 4p16.1.

SOURCE

Cappuccino (S-5) is a mouse monoclonal antibody raised against recombinant Cappuccino of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

Cappuccino (S-5) is recommended for detection of Cappuccino of 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).

Suitable for use as control antibody for Cappuccino siRNA (h): sc-60324, Cappuccino shRNA Plasmid (h): sc-60324-SH and Cappuccino shRNA (h) Lentiviral Particles: sc-60324-V.

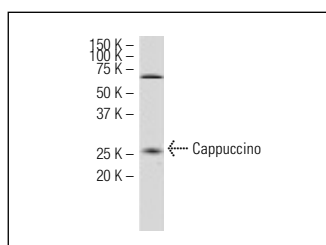
Molecular Weight of Cappuccino: 32 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

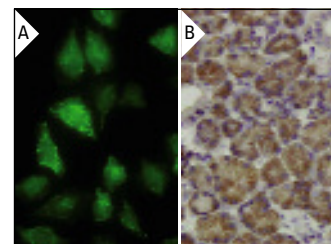
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2050 or ABC: sc-2017 mouse IgG Staining Systems.

DATA



Cappuccino (S-5): sc-100683. Western blot analysis of Cappuccino expression in HeLa whole cell lysate.



Cappuccino (S-5): sc-100683. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells (A) and immunoperoxidase staining of formalin-fixed, paraffin-embedded human salivary gland tissue (B) showing cytoplasmic localization.

PROTOCOLS

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