

# Cappuccino (K-15): sc-46824

## 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: BLOC1S4 (human) mapping to 4p16.1; Bloc1s4 (mouse) mapping to 5 B3.

## SOURCE

Cappuccino (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-46824 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Cappuccino (K-15) 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), 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).

Cappuccino (K-15) is also recommended for detection of Cappuccino in additional species, including equine, canine and porcine.

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.

## 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) 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.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.