

BLOS1 (C-18): sc-167208

BACKGROUND

BLOS1, also known as BLOC1S1 (biogenesis of lysosome-related organelles complex 1 subunit 1), is a 125 amino acid protein that belongs to the BLOC1S1 family. BLOS1, along with BLOS2, BLOS3, Dysbindin, Muted, Pallidin, Capuccino and Snapin, are subunits of biogenesis of lysosome-related organelles complex-1 (BLOC1). BLOC1 is required for normal biogenesis of specialized organelles of the endosomal-lysosomal system, such as melanosomes and platelet dense granules. BLOC1 plays a key role in endosomal trafficking and as such has been found to regulate cell-surface abundance of the D2 dopamine receptor, the biogenesis and fusion of synaptic vesicles and neurite outgrowth. The BLOS1 gene maps to chromosome 12q13.2. Encoding over 1,100 genes within 132 million bases, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12 including hypochondrogenesis, achondrogenesis and Kniest dysplasia.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM[™]. 1996. Johns Hopkins University, Baltimore, MD. MIM Number: 601444. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Starcevic, M. and Dell'Angelica, E.C. 2004. Identification of snapin and three novel proteins (BLOS1, BLOS2, and BLOS3/reduced pigmentation) as subunits of biogenesis of lysosome-related organelles complex-1 (BLOC-1). *J. Biol. Chem.* 279: 28393-28401.
3. Segel, R., et al. 2006. The natural history of trisomy 12p. *Am. J. Med. Genet. A* 140: 695-703.
4. Nazarian, R., et al. 2006. Reinvestigation of the dysbindin subunit of BLOC-1 (biogenesis of lysosome-related organelles complex-1) as a dystrobrevin-binding protein. *Biochem. J.* 395: 587-598.

CHROMOSOMAL LOCATION

Genetic locus: BLOC1S1 (human) mapping to 12q13.2; Bloc1s1 (mouse) mapping to 10 D3.

SOURCE

BLOS1 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BLOS1 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-167208 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.

RESEARCH USE

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

APPLICATIONS

BLOS1 (C-18) is recommended for detection of BLOS1 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), 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); may cross-react with EG666114.

BLOS1 (C-18) is also recommended for detection of BLOS1 in additional species, including equine, canine, bovine and porcine.

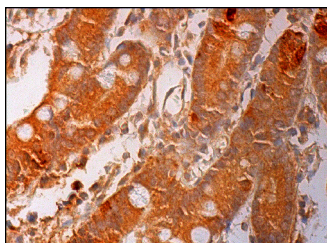
Suitable for use as control antibody for BLOS1 siRNA (h): sc-96033, BLOS1 siRNA (m): sc-141711, BLOS1 shRNA Plasmid (h): sc-96033-SH, BLOS1 shRNA Plasmid (m): sc-141711-SH, BLOS1 shRNA (h) Lentiviral Particles: sc-96033-V and BLOS1 shRNA (m) Lentiviral Particles: sc-141711-V.

Molecular Weight of BLOS1: 14 kDa.

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. 3) Immunohistochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



BLOS1 (C-18): sc-167208. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

PROTOCOLS

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



Try **BLOS1 (E-4): sc-515444**, our highly recommended monoclonal alternative to BLOS1 (C-18).