

Bles03 (N-15): sc-161389

BACKGROUND

Bles03 (basophilic leukemia expressed protein BLES03), also known as P5326, is a 251 amino acid protein belonging to the UPF0696 family that has a similar structure to that of eIF4E (eukaryotic initiation factor 4E), a protein that recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation of protein synthesis and facilitates ribosome binding by inducing the unwinding of the mRNAs secondary structures. The gene encoding Bles03 is located on human chromosome 11, in between genes encoding the proteins NC2 α and Fra-1, both of which are involved in transcription initiation, thereby suggesting that Bles03 itself may be involved in a biochemical process that requires recognition of nucleic acids.

REFERENCES

- Joshi, B., et al. 1995. Phosphorylation of eukaryotic protein synthesis initiation factor 4E at Ser 209. *J. Biol. Chem.* 270: 14597-14603.
- Whalen, S.G., et al. 1996. Phosphorylation of eIF-4E on Serine 209 by protein kinase C is inhibited by the translational repressors, 4E-binding proteins. *J. Biol. Chem.* 271: 11831-11837.
- Geisberg, J.V., et al. 2001. Yeast NC2 associates with the RNA polymerase II preinitiation complex and selectively affects transcription *in vivo*. *Mol. Cell. Biol.* 21: 2736-2742.
- Bitto, E., et al. 2005. The structure at 2.5 Å resolution of human basophilic leukemia-expressed protein BLES03. *Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun.* 61: 812-817.
- Zehelein, J., et al. 2006. Skipping of Exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. *J. Biol. Chem.* 281: 35397-35403.
- Chiappetta, G., et al. 2007. Fra-1 protein overexpression is a feature of hyperplastic and neoplastic breast disorders. *BMC Cancer* 7: 17.
- Berger, A.C., et al. 2007. The subcellular localization of the Niemann-Pick Type C proteins depends on the adaptor complex AP-3. *J. Cell Sci.* 120: 3640-3652.

CHROMOSOMAL LOCATION

Genetic locus: C11orf68 (human) mapping to 11q13.1; AI837181 (mouse) mapping to 19 A.

SOURCE

Bles03 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Bles03 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161389 P, (100 μ g 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

Bles03 (N-15) is recommended for detection of Bles03 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).

Bles03 (N-15) is also recommended for detection of Bles03 in additional species, including porcine.

Suitable for use as control antibody for Bles03 siRNA (h): sc-96826, Bles03 siRNA (m): sc-141710, Bles03 shRNA Plasmid (h): sc-96826-SH, Bles03 shRNA Plasmid (m): sc-141710-SH, Bles03 shRNA (h) Lentiviral Particles: sc-96826-V and Bles03 shRNA (m) Lentiviral Particles: sc-141710-V.

Molecular Weight of Bles03: 27 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or PC-3 cell lysate: sc-2220.

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 or our catalog for detailed protocols and support products.