MASK-BP3 (K-12): sc-161109



The Power to Question

BACKGROUND

Ankyrin (ANK) repeat-containing proteins are associated with a wide range of biological functions and participate in several processes, such as cell differentiation and transcriptional regulation. MASK-BP3 (MASK-4E binding protein 3), also known as multiple ankyrin repeats single KH domain protein isoform 2, is a 2,617 amino acid protein with one KH domain. The gene encoding MASK-BP3 is located on human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

- Dixon, M.J., Read, A.P., Donnai, D., Colley, A., Dixon, J. and Williamson, R. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. Am. J. Hum. Genet. 49: 17-22.
- Saltman, D.L., Dolganov, G.M., Warrington, J.A., Wasmuth, J.J. and Lovett, M. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence in situ hybridization. Genomics 16: 726-732.
- Poulin, F., Brueschke, A. and Sonenberg, N. 2003. Gene fusion and overlapping reading frames in the mammalian genes for 4E-BP3 and MASK. J. Biol. Chem. 278: 52290-52297.
- 4. Santos Duarte, A.d.a. S., Traina, F., Favaro, P.M., Bassères, D.S., de Carvalho, I.C., Medina, S., Costa, F.F. and Saad, S.T. 2005. Characterisation of a new splice variant of MASK-BP3(ARF) and MASK human genes, and their expression patterns during haematopoietic cell differentiation. Gene 363: 113-122.
- Du, H.Y., Idol, R., Robledo, S., Ivanovich, J., An, P., Londono-Vallejo, A., Wilson, D.B., Mason, P.J. and Bessler, M. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p-syndrome. Aging Cell 6: 689-697.

CHROMOSOMAL LOCATION

Genetic locus: ANKHD1-EIF4EBP3 (human) mapping to 5q31.3.

SOURCE

MASK-BP3 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MASK-BP3 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161109 P, (100 μ g 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

MASK-BP3 (K-12) is recommended for detection of MASK-BP3 of human and rat 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).

Suitable for use as control antibody for MASK-BP3 siRNA (h): sc-91894, MASK-BP3 shRNA Plasmid (h): sc-91894-SH and MASK-BP3 shRNA (h) Lentiviral Particles: sc-91894-V.

Molecular Weight of MASK-BP3: 270 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) with UltraCruz™ Mounting Medium: sc-24941.

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.

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