

# SBNO1 (A-5): sc-166519

## BACKGROUND

SBNO1 (strawberry notch homolog 1), also designated Sno or MOP-3 (monocyte protein 3) in humans, is a 1,392 amino acid protein encoded by the human gene of the same name located on chromosome 12. 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. Noonan syndrome, which includes heart and facial developmental defects among the primary symptoms, is caused by a mutant form of PTPN11 gene product, SH-PTP2. Chromosome 12 is also home to a homeobox gene cluster, which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster, encoding C-type lectin proteins which mediate the NK cell response to MHC I interaction. Trisomy 12p leads to facial development defects, seizure disorders and a host of other symptoms which vary in severity depending on the extent of mosaicism. It is most severe in cases of complete trisomy.

## REFERENCES

- Allen, T.L., et al. 1996. Cytogenetic and molecular analysis in Trisomy 12p. *Am. J. Med. Genet.* 63: 250-256.
- Yang, W. and Cole, W.G. 1998. Low basal transcripts of the COL2A1 collagen gene from lymphoblasts show alternative splicing of exon 12 in the kniest form of spondyloepiphyseal dysplasia. *Hum. Mutat.* 1: S1-S2.
- Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
- Zumkeller, W., et al. 2004. Genotype/phenotype analysis in a patient with pure and complete trisomy 12p. *Am. J. Med. Genet. A* 129A: 261-264.

## CHROMOSOMAL LOCATION

Genetic locus: SBNO1 (human) mapping to 12q24.31; Sbn1 (mouse) mapping to 5 F.

## SOURCE

SBNO1 (A-5) is a mouse monoclonal antibody raised against amino acids 1-240 mapping at the N-terminus of SBNO1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-166519 X, 200 µg/0.1 ml.

SBNO1 (A-5) is available conjugated to agarose (sc-166519 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166519 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166519 PE), fluorescein (sc-166519 FITC), Alexa Fluor® 488 (sc-166519 AF488), Alexa Fluor® 546 (sc-166519 AF546), Alexa Fluor® 594 (sc-166519 AF594) or Alexa Fluor® 647 (sc-166519 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166519 AF680) or Alexa Fluor® 790 (sc-166519 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

SBNO1 (A-5) is recommended for detection of SBNO1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SBNO1 siRNA (h): sc-62633, SBNO1 siRNA (m): sc-62634, SBNO1 shRNA Plasmid (h): sc-62633-SH, SBNO1 shRNA Plasmid (m): sc-62634-SH, SBNO1 shRNA (h) Lentiviral Particles: sc-62633-V and SBNO1 shRNA (m) Lentiviral Particles: sc-62634-V.

SBNO1 (A-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

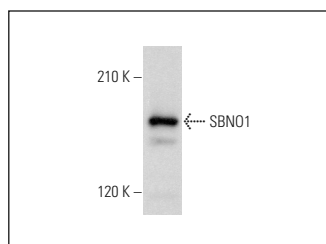
Molecular Weight of SBNO1: 155 kDa.

Positive Controls: rat brain extract: sc-2392, Ramos cell lysate: sc-2216 or K-562 whole cell lysate: sc-2203.

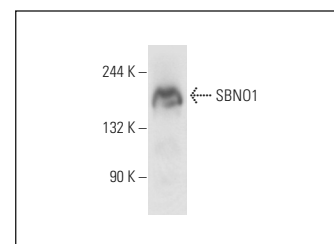
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



SBNO1 (A-5): sc-166519. Western blot analysis of SBNO1 expression in K-562 whole cell lysate.



SBNO1 (A-5): sc-166519. Western blot analysis of SBNO1 expression in Ramos whole cell lysate.

## 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.

## PROTOCOLS

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