

# BCDIN3D (L-16): sc-245032

## BACKGROUND

BCDIN3D is a 292 amino acid protein that belongs to the methyltransferase superfamily. Containing one BIN3 domain, BCDIN3D may be associated with obesity and BMI. A probable methyltransferase, BCDIN3D is encoded by a gene located on human chromosome 12, which 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.

## REFERENCES

1. Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Proc. Natl. Acad. Sci. USA 99: 16899-16903.
2. Walley, A.J., et al. 2009. The genetic contribution to non-syndromic human obesity. Nat. Rev. Genet. 10: 431-442.
3. Guardiola, M.T., et al. 2010. Pericentric inversion (12)(p12q13-14) as the sole chromosomal abnormality in a leiomyoma of the vulva. Cancer Genet. Cytogenet. 199: 21-23.
4. Aytekin, T., et al. 2010. Deletion mapping of chromosome region 12q13-24 in colorectal cancer. Cancer Genet. Cytogenet. 201: 32-38.

## CHROMOSOMAL LOCATION

Genetic locus: BCDIN3D (human) mapping to 12q13.12; Bcdin3d (mouse) mapping to 15 F1.

## SOURCE

BCDIN3D (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BCDIN3D 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-245032 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.

## PROTOCOLS

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

## APPLICATIONS

BCDIN3D (L-16) is recommended for detection of BCDIN3D of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with BCDIN3.

BCDIN3D (L-16) is also recommended for detection of BCDIN3D in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BCDIN3D siRNA (h): sc-95998, BCDIN3D siRNA (m): sc-141666, BCDIN3D shRNA Plasmid (h): sc-95998-SH, BCDIN3D shRNA Plasmid (m): sc-141666-SH, BCDIN3D shRNA (h) Lentiviral Particles: sc-95998-V and BCDIN3D shRNA (m) Lentiviral Particles: sc-141666-V.

Molecular Weight of BCDIN3D: 33 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## RESEARCH USE

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


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Try **BCDIN3D (F-5): sc-390348**, our highly recommended monoclonal alternative to BCDIN3D (L-16).