

BCDIN3D (h): 293T Lysate: sc-116532

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.
5. Ierardo, G., et al. 2010. Noonan syndrome: a case report. *Eur. J. Paediatr. Dent.* 11: 97-100.
6. Ng, M.C., et al. 2010. Implication of genetic variants near NEGR1, SEC16B, TMEM18, ETV5/DGKG, GNPDA2, LIN7C/BDNF, MTCH2, BCDIN3D/FAIM2, SH2B1, FTO, MC4R, and KCTD15 with obesity and type 2 diabetes in 7705 Chinese. *J. Clin. Endocrinol. Metab.* 95: 2418-2425.
7. Scherag, A., et al. 2010. Two new Loci for body-weight regulation identified in a joint analysis of genome-wide association studies for early-onset extreme obesity in French and German study groups. *PLoS Genet.* 6: e1000916.

CHROMOSOMAL LOCATION

Genetic locus: BCDIN3D (human) mapping to 12q13.12.

PRODUCT

BCDIN3D (h): 293T Lysate represents a lysate of human BCDIN3D transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

BCDIN3D (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive BCDIN3D antibodies. Recommended use: 10-20 µl per lane.

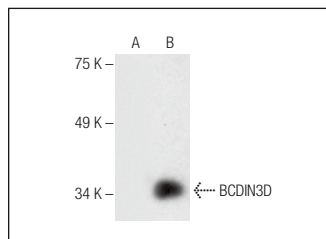
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

BCDIN3D (F-5): sc-390348 is recommended as a positive control antibody for Western Blot analysis of enhanced human BCDIN3D expression in BCDIN3D transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



BCDIN3D (F-5): sc-390348. Western blot analysis of BCDIN3D expression in non-transfected: sc-117752 (A) and human BCDIN3D transfected: sc-116532 (B) 293T whole cell lysates.

PROTOCOLS

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