

ZMYND12 (G-13): sc-241759

BACKGROUND

ZMYND12 (zinc finger MYND domain-containing protein 12) is a 365 amino acid protein that contains one MYND-type zinc finger and two TPR repeats. The gene encoding ZMYND12 maps to human chromosome 1, which is the largest human chromosome spanning about 260 million base pairs and makes up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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2. Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders— cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. *Am. J. Hum. Genet.* 69: 428-433.
3. Wiemann, S., et al. 2001. Toward a catalog of human genes and proteins: sequencing and analysis of 500 novel complete protein coding human cDNAs. *Genome Res.* 11: 422-435.
4. Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. *Nat. Genet.* 36: 40-45.
5. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.
6. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. *Nature* 441: 315-321.
7. Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC-1 in major mental illness. *Schizophr. Bull.* 32: 409-416.

CHROMOSOMAL LOCATION

Genetic locus: ZMYND12 (human) mapping to 1p34.2; Zmynd12 (mouse) mapping to 4 D2.1.

SOURCE

ZMYND12 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZMYND12 of human origin.

RESEARCH USE

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

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-241759 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZMYND12 (G-13) is recommended for detection of ZMYND12 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); non cross-reactive with other ZMYND family members.

ZMYND12 (G-13) is also recommended for detection of ZMYND12 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ZMYND12 siRNA (h): sc-78859, ZMYND12 siRNA (m): sc-155632, ZMYND12 shRNA Plasmid (h): sc-78859-SH, ZMYND12 shRNA Plasmid (m): sc-155632-SH, ZMYND12 shRNA (h) Lentiviral Particles: sc-78859-V and ZMYND12 shRNA (m) Lentiviral Particles: sc-155632-V.

Molecular Weight of ZMYND12: 42 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) 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.