SANTA CRUZ BIOTECHNOLOGY, INC.

DDI2 (N-13): sc-241382



BACKGROUND

DDI1 and DDI2 are ubiquitin receptor homologs of the *Saccharomyces cerevisiae* ddi1 protein, which is involved in regulation of the cell cycle and the late secretory pathway. DDI2 is a 399 amino acid protein that contains one ubiquitin-like domain and exists as 3 isoforms as a result of alternative splicing. The gene encoding DDI2 maps to human chromosome 1, the largest human chromosome which spans about 260 million base pairs and makes up 8% of the human genome. Other notable genes located on chromosome 1 include LMNA, which is associated with the rare aging disease Hutchinson-Gilford progeria, and the MUTYH gene, which is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome.

REFERENCES

- Watson, M.L., et al. 1990. Genomic organization of the Selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. J. Exp. Med. 172: 263-272.
- 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. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
- 4. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. Nature 441: 315-321.
- Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC1 in major mental illness. Schizophr. Bull. 32: 409-416.
- 6. Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. Anticancer Res. 26: 953-959.
- McClintock, D., et al. 2006. Hutchinson-Gilford progeria mutant Lamin A primarily targets human vascular cells as detected by an anti-Lamin A G608G antibody. Proc. Natl. Acad. Sci. USA 103: 2154-2159.
- 8. Gabriely, G., et al. 2008. Different domains of the UBL-UBA ubiquitin receptor, DDI1/Vsm1, are involved in its multiple cellular roles. Mol. Biol. Cell. 19: 3625-3637.

CHROMOSOMAL LOCATION

Genetic locus: DDI2 (human) mapping to 1p36.21; Ddi2 (mouse) mapping to 4 E1.

SOURCE

DDI2 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DDI2 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-241382 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DDI2 (N-13) is recommended for detection of DDI2 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 DDI1.

DDI2 (N-13) is also recommended for detection of DDI2 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for DDI2 siRNA (h): sc-78585, DDI2 siRNA (m): sc-142918, DDI2 shRNA Plasmid (h): sc-78585-SH, DDI2 shRNA Plasmid (m): sc-142918-SH, DDI2 shRNA (h) Lentiviral Particles: sc-78585-V and DDI2 shRNA (m) Lentiviral Particles: sc-142918-V.

Molecular Weight of DDI2 isoforms 1/2/3: 47/45/24 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) Immunofluo-rescence: 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.

PROTOCOLS

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

MONOS Satisfation Guaranteed Try DDI2 (A-3): sc-514004, our highly recommended monoclonal alternative to DDI2 (N-13).