## SANTA CRUZ BIOTECHNOLOGY, INC.

# DDI1 (G-13): sc-167609



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. DDI1 is a 396 amino acid protein that contains one ubiquitin-like domain. The gene encoding DDI1 maps to human chromosome 11, which makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and  $\beta$  thalassemia are caused by HBB gene mutations. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene.

## REFERENCES

- 1. Grossfeld, P.D., et al. 2004. The 11q terminal deletion disorder: a prospective study of 110 cases. Am. J. Med. Genet. A 129: 51-61.
- Loussouarn, G., et al. 2006. KCNQ1 K<sup>+</sup> channel-mediated cardiac channelopathies. Methods Mol. Biol. 337: 167-183.
- Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. Nature 440: 497-500.
- Zehelein, J., et al. 2006. Skipping of exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. J. Biol. Chem. 281: 35397-35403.
- 5. Lee, S.P., et al. 2007. Phase I study of eptifibatide in patients with sickle cell anaemia. Br. J. Haematol. 139: 612-620.
- Berger, A.C., et al. 2007. The subcellular localization of the Niemann-Pick type C proteins depends on the adaptor complex AP-3. J. Cell Sci. 120: 3640-3652.

#### CHROMOSOMAL LOCATION

Genetic locus: DDI1 (human) mapping to 11q22.3; Ddi1 (mouse) mapping to 9 A1.

#### SOURCE

DDI1 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DDI1 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167609 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### STORAGE

Store at 4° C, \*\*D0 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.

#### APPLICATIONS

DDI1 (G-13) is recommended for detection of DDI1 of human and, to a lesser extent, mouse 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 DDI2.

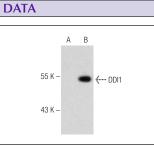
Suitable for use as control antibody for DDI1 siRNA (h): sc-97078, DDI1 siRNA (m): sc-142917, DDI1 shRNA Plasmid (h): sc-97078-SH, DDI1 shRNA Plasmid (m): sc-142917-SH, DDI1 shRNA (h) Lentiviral Particles: sc-97078-V and DDI1 shRNA (m) Lentiviral Particles: sc-142917-V.

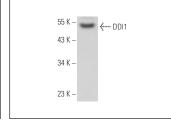
Molecular Weight of DDI1: 44 kDa.

Positive Controls: DDI1 (h): 293T Lysate: sc-370370.

### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.





DDI1 (G-13): sc-167609. Western blot analysis of DDI1 expression in non-transfected: sc-117752 (**A**) and human DDI1 transfected: sc-370370 (**B**) 293T whole cell lysates.

DDI1 (G-13): sc-167609. Western blot analysis of DDI1 expression in mouse brain tissue extract.

#### PROTOCOLS

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