

DDX29 (F-1): sc-365508

BACKGROUND

DDX29 (putative ATP-dependent RNA helicase DHX29) is a 1,369 amino acid protein encoded by the human gene DDX29. This protein belongs to the DEAD-box helicase family (DEAH subfamily) and contains one helicase ATP-binding domain and one helicase C-terminal domain. DDX29 is a nuclear protein found on chromosome 5 that likely functions as an ATP-dependent RNA helicase. RNA helicases are highly conserved enzymes that utilize the energy derived from NTP hydrolysis to modulate the structure of RNA. RNA helicases participate in all biological processes that involve RNA, including transcription, splicing and translation.

REFERENCES

- Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. *Am. J. Hum. Genet.* 49: 17-22.
- Saltman, D.L., et al. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence *in situ* hybridization. *Genomics* 16: 726-732.
- Kadmon, M., et al. 2001. Duodenal adenomatosis in familial adenomatous polyposis coli. A review of the literature and results from the Heidelberg Polyposis Register. *Int. J. Colorectal Dis.* 16: 63-75.
- South, S.T., et al. 2006. A new genomic mechanism leading to cri-du-chat syndrome. *Am. J. Med. Genet. A* 140: 2714-2720.
- Aretz, S., et al. 2007. Somatic APC mosaicism: a frequent cause of familial adenomatous polyposis (FAP). *Hum. Mutat.* 28: 985-992.
- Cleaver, J.E., et al. 2007. Cockayne syndrome exhibits dysregulation of p21 and other gene products that may be independent of transcription-coupled repair. *Neuroscience* 145: 1300-1308.

CHROMOSOMAL LOCATION

Genetic locus: DHX29 (human) mapping to 5q11.2; Dhx29 (mouse) mapping to 13 D2.2.

SOURCE

DDX29 (F-1) is a mouse monoclonal antibody raised against amino acids 255-502 mapping within an internal region of DDX29 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DDX29 (F-1) is available conjugated to agarose (sc-365508 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365508 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365508 PE), fluorescein (sc-365508 FITC), Alexa Fluor® 488 (sc-365508 AF488), Alexa Fluor® 546 (sc-365508 AF546), Alexa Fluor® 594 (sc-365508 AF594) or Alexa Fluor® 647 (sc-365508 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365508 AF680) or Alexa Fluor® 790 (sc-365508 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

DDX29 (F-1) is recommended for detection of DDX29 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).

Suitable for use as control antibody for DDX29 siRNA (h): sc-91695, DDX29 siRNA (m): sc-142929, DDX29 shRNA Plasmid (h): sc-91695-SH, DDX29 shRNA Plasmid (m): sc-142929-SH, DDX29 shRNA (h) Lentiviral Particles: sc-91695-V and DDX29 shRNA (m) Lentiviral Particles: sc-142929-V.

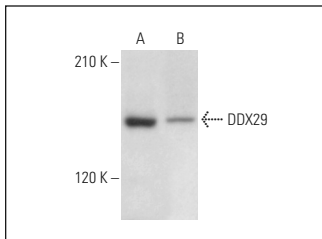
Molecular Weight of DDX29: 155 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, HeLa whole cell lysate: sc-2200 or F9 cell lysate: sc-2245.

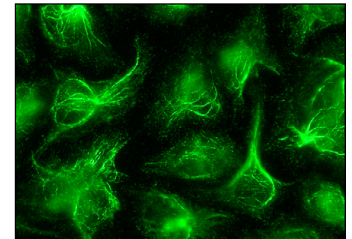
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



DDX29 (F-1): sc-365508. Western blot analysis of DDX29 expression in HeLa (A) and F9 (B) whole cell lysates.



DDX29 (F-1): sc-365508. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

STORAGE

Store at 4° C, **DO 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.

PROTOCOLS

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