

UNC93A (F-2): sc-390157

BACKGROUND

UNC93A (UNC-93 homolog A), also known as HmUNC-93A, is a 457 amino acid multi-pass membrane protein and human homolog of *C. elegans* UNC-93, a protein involved in the coordination and regulation of muscle contraction. Expressed in testis, small intestine, spleen, prostate and ovary, UNC93A is encoded by a gene located on human chromosome 6q27. Human chromosome 6 contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

1. Makino, N., et al. 2001. Isolation and characterization of the human gene homologous to the *Drosophila* headcase (hdc) gene in chromosome bands 6q23-q24, a region of common deletion in human pancreatic cancer. *DNA Seq.* 11: 547-553.
2. Liu, Y., et al. 2002. The human homologue of UNC-93 maps to chromosome 6q27-characterisation and analysis in sporadic epithelial ovarian cancer. *BMC Genet.* 3: 20.
3. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
4. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607995. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: UNC93A (human) mapping to 6q27; Unc93a (mouse) mapping to 17 A1.

SOURCE

UNC93A (F-2) is a mouse monoclonal antibody raised against a peptide mapping near the C-terminus of UNC93A of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

UNC93A (F-2) is available conjugated to agarose (sc-390157 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390157 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390157 PE), fluorescein (sc-390157 FITC), Alexa Fluor® 488 (sc-390157 AF488), Alexa Fluor® 546 (sc-390157 AF546), Alexa Fluor® 594 (sc-390157 AF594) or Alexa Fluor® 647 (sc-390157 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390157 AF680) or Alexa Fluor® 790 (sc-390157 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390157 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

UNC93A (F-2) is recommended for detection of UNC93A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 UNC93A siRNA (h): sc-95271, UNC93A siRNA (m): sc-154922, UNC93A shRNA Plasmid (h): sc-95271-SH, UNC93A shRNA Plasmid (m): sc-154922-SH, UNC93A shRNA (h) Lentiviral Particles: sc-95271-V and UNC93A shRNA (m) Lentiviral Particles: sc-154922-V.

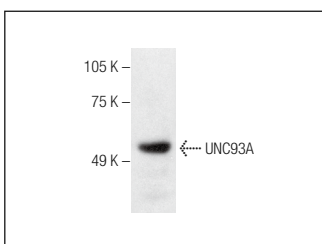
Molecular Weight of UNC93A: 60 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, EOC 20 whole cell lysate: sc-364187 or SK-MEL-28 cell lysate: sc-2236.

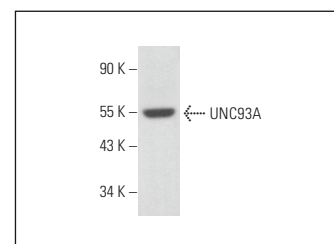
RECOMMENDED SUPPORT REAGENTS

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



UNC93A (F-2): sc-390157. Western blot analysis of UNC93A expression in SK-MEL-28 whole cell lysate.



UNC93A (F-2): sc-390157. Western blot analysis of UNC93A expression in EOC 20 whole cell lysate.

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.

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