# SANTA CRUZ BIOTECHNOLOGY, INC.

# UNC93A (I-13): sc-135541



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 6. 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

- Makino, N., Yamato, T., Inoue, H., Furukawa, T., Abe, T., Yokoyama, T., Yatsuoka, T., Fukushige, S., Orikasa, S., Takahashi, T. and Horii, A. 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.
- Liu, Y., Dodds, P., Emilion, G., Mungall, A.J., Dunham, I., Beck, S., Wells, R.S., Charnock, F.M. and Ganesan, T.S. 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/
- McQueen, M.B., Devlin, B., Faraone, S.V., Nimgaonkar, V.L., Sklar, P., Smoller, J.W., Abou Jamra, R., Albus, M., Bacanu, S.A., Baron, M., Barrett, T.B., Berrettini, W., Blacker, D., Byerley, W., Cichon, S., Coryell, W., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.

#### CHROMOSOMAL LOCATION

Genetic locus: UNC93A (human) mapping to 6q27.

# SOURCE

UNC93A (I-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of UNC93A of human origin.

#### PRODUCT

Each vial contains 100  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-135541 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

UNC93A (I-13) is recommended for detection of UNC93A of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with UNC93B1 or UNC93B6.

Suitable for use as control antibody for UNC93A siRNA (h): sc-95271, UNC93A shRNA Plasmid (h): sc-95271-SH and UNC93A shRNA (h) Lentiviral Particles: sc-95271-V.

Molecular Weight of UNC93A: 60 kDa.

# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

### **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 UNC93A (F-2): sc-390157, our highly recommended monoclonal alternative to UNC93A (I-13).