# SANTA CRUZ BIOTECHNOLOGY, INC.

# LOC729602 (C-13): sc-100013



The Power to Question

## BACKGROUND

LOC729602, also known as NPIP (nuclear pore complex interacting protein)like protein ENSP00000283050, is a 327 amino acid protein that belongs to the NPIP family and is encoded by a gene that maps to human chromosome 18p11.21. Encoding over 300 genes, chromosome 18 contains about 76 million bases. Trisomy 18, or Edwards syndrome, is the second most common trisomy after Downs syndrome. Symptoms of Edwards syndrome include low birth weight, a variety of physical development defects, heart deformations and breathing difficulty. Translocation between chromosome 18 and 14 is the most common translocation in cancers, and occurs in follicular lymphomas. Niemann-Pick disease, hereditary hemorrhagic telangiectasia and erythropoietic protoporphyria are associated with chromosome 18. The TGF $\beta$  modulators, Smad2, Smad4 and Smad7 are encoded by chromosome 18.

# REFERENCES

- Greer, W.L., Riddell, D.C., Byers, D.M., Welch, J.P., Girouard, G.S., Sparrow, S.M., Gillan, T.L. and Neumann, P.E. 1997. Linkage of Niemann-Pick disease type D to the same region of human chromosome 18 as Niemann-Pick disease type C. Am. J. Hum. Genet. 61: 139-142.
- Petek, E., Pertl, B., Tschernigg, M., Bauer, M., Mayr, J., Wagner, K. and Kroisel, P.M. 2003. Characterisation of a 19-year-old "long-term survivor" with Edwards syndrome. Genet. Couns. 14: 239-244.
- Grosso, S., Pucci, L., Di Bartolo, R.M., Gobbi, G., Bartalini, G., Anichini, C., Scarinci, R., Balestri, M., Farnetani, M.A., Cioni, M., Morgese, G. and Balestri, P. 2005. Chromosome 18 aberrations and epilepsy: a review. Am. J. Med. Genet. A. 134A: 88-94.
- Broderick, P., Carvajal-Carmona, L., Pittman, A.M., Webb, E., Howarth, K., Rowan, A., Lubbe, S., Spain, S., Sullivan, K., Fielding, S., Jaeger, E., Vijayakrishnan, J., Kemp, Z., Gorman, M., Chandler, I., Papaemmanuil, E., et al. 2007. A genome-wide association study shows that common alleles of SMAD7 influence colorectal cancer risk. Nat. Genet. 39: 1315-1317.
- Shovlin, C.L., Sulaiman, N.L., Govani, F.S., Jackson, J.E. and Begbie, M.E. 2007. Elevated factor VIII in hereditary haemorrhagic telangiectasia (HHT): association with venous thromboembolism. Thromb. Haemost. 98: 1031-1039.
- Herrero Hernández, E. and Discalzi, G. 2009. Hypermanganesemia, hereditary hemorrhagic telangiectasia, brain abscess: the hepatic connection. Neurology. 73: 405; author reply 405-405; author reply 406.

# CHROMOSOMAL LOCATION

Genetic locus: LOC729602 (human) mapping to 18p11.21.

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# PROTOCOLS

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

#### SOURCE

LOC729602 (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of LOC729602 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-100013 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# APPLICATIONS

LOC729602 (C-13) is recommended for detection of LOC729602 of 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).

Suitable for use as control antibody for LOC729602 siRNA (h): sc-75649, LOC729602 shRNA Plasmid (h): sc-75649-SH and LOC729602 shRNA (h) Lentiviral Particles: sc-75649-V.

Molecular Weight of LOC729602: 42 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.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.