



## LOC728111 (C-14): sc-84964

### BACKGROUND

Encoding over 300 genes, chromosome 18 contains about 76 million bases. Trisomy 18, or Edwards syndrome, is the second most common trisomy after Down 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. The LOC728111 gene product has been provisionally designated LOC728111 pending further characterization.

### REFERENCES

- Carstea, E.D., Polymeropoulos, M.H., Parker, C.C., Detera-Wadleigh, S.D., O'Neill, R.R., Patterson, M.C., Goldin, E., Xiao, H., Straub, R.E., Vanier, M.T., et al. 1993. Linkage of Niemann-Pick disease type C to human chromosome 18. *Proc. Natl. Acad. Sci. USA* 90: 2002-2004.
- 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.
- Raghavan, S.C., Swanson, P.C., Wu, X., Hsieh, C.L. and Lieber, M.R. 2004. A non-B-DNA structure at the Bcl-2 major breakpoint region is cleaved by the RAG complex. *Nature* 428: 88-93.
- 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* 134: 88-94.
- Aurizi, C., Schneider-Yin, X., Sorge, F., Macri, A., Minder, E.I. and Biolcati, G. 2007. Heterogeneity of mutations in the ferrochelatase gene in Italian patients with erythropoietic protoporphyria. *Mol. Genet. Metab.* 90: 402-407.
- Broderick, P., Carvajal-Carmona, L., Pittman, A.M., Webb, E., Howarth, K., Rowan, A., Lubbe, S., Spain, S., Sullivan, K., Fielding, S., Jaeger, E., Vijaykrishnan, 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.
- Kamal, A.H. and Prakash, U.B. 2007. Hereditary hemorrhagic telangiectasia. *Mayo Clin. Proc.* 82: 1364.
- 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.

### CHROMOSOMAL LOCATION

Genetic locus: hCG\_1659830 (human) mapping to 18q21.32.

### RESEARCH USE

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

### SOURCE

LOC728111 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of LOC728111 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-84964 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

LOC728111 (C-14) is recommended for detection of LOC728111 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 LOC728111 siRNA (h): sc-75579, LOC728111 shRNA Plasmid (h): sc-75579-SH and LOC728111 shRNA (h) Lentiviral Particles: sc-75579-V.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or Jurkat whole cell lysate: sc-2204.

### 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) Immunofluorescence: 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.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.