## SANTA CRUZ BIOTECHNOLOGY, INC.

# SLMO1 (T-20): sc-85159



#### BACKGROUND

In Drosophilia, slowmo (slmo) is a mitochondrial protein that is essential for the developing nervous system. Null mutations in the slmo gene leads to reduced mobility and lethality in first-instar larvae. SLMO1 (slowmo homolog 1) is a 172 amino acid protein that belongs to the slowmo family. The SLMO1 protein contains a PRELI/MSF1 domain. The SLMO1 gene is conserved in canine, bovine, mouse, rat, chicken, zebrafish, S. cerevisiae, K. lactis, S. pombe and N. crassa, and 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.

#### REFERENCES

- 1. Carstea, E.D., et al. 1993. Linkage of Niemann-Pick disease type C to human chromosome 18. Proc. Natl. Acad. Sci. USA 90: 2002-2004.
- 2. Petek, E., et al. 2003. Characterisation of a 19-year-old "long-term survivor" with Edwards syndrome. Genet. Couns. 14: 239-244.
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- 4. Grosso, S., et al. 2005. Chromosome 18 aberrations and epilepsy: a review. Am. J. Med. Genet. A 134: 88-94.
- 5. Aurizi, C., et al. 2007. Heterogeneity of mutations in the ferrochelatase gene in Italian pa-tients with erythropoietic protoporphyria. Mol. Genet. Metab. 90: 402-407.
- 6. Broderick, P., et al. 2007. A genome-wide association study shows that common alleles of Smad7 influence colorectal cancer risk. Nat. Genet. 39: 1315-1317.
- 7. Kamal, A.H., et al. 2007. Hereditary hemorrhagic telangiectasia. Mayo Clin. Proc. 82: 1364.
- 8. Shovlin, C.L., et al. 2007. Elevated factor VIII in hereditary haemorrhagic telangiectasia (HHT): Association with venous thromboembolism. Thromb. Haemost, 98: 1031-1039.

#### CHROMOSOMAL LOCATION

Genetic locus: SLMO1 (human) mapping to 18p11.21; Slmo1 (mouse) mapping to 18 E1.

#### SOURCE

SLMO1 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SLMO1 of human origin.

#### **STORAGE**

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

#### PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85159 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

SLMO1 (T-20) is recommended for detection of SLMO1 of mouse, rat and 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).

SLMO1 (T-20) is also recommended for detection of SLMO1 in additional species, including canine.

Suitable for use as control antibody for SLMO1 siRNA (h): sc-76516, SLMO1 siRNA (m): sc-153601, SLM01 shRNA Plasmid (h): sc-76516-SH, SLM01 shRNA Plasmid (m): sc-153601-SH. SLMO1 shRNA (h) Lentiviral Particles: sc-76516-V and SLMO1 shRNA (m) Lentiviral Particles: sc-153601-V.

Molecular Weight of SLM01: 19 kDa.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **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.