# SLAIN1 (N-17): sc-85155



The Power to Question

## **BACKGROUND**

SLAIN1 (SLAIN motif family, member 1) is a 561 amino acid member of the SLAIN motif-containing family and is expressed in embryonic stem cells, as well as in lung, brain and testis, where it exists as 2 alternatively spliced isoforms. The gene encoding SLAIN1 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome. As with most chromosomes, polysomy of part or all of chromosome 13 is deleterious to development and decreases the odds of survival. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

# **REFERENCES**

- 1. Dunham, A., et al. 2004. The DNA sequence and analysis of human chromosome 13. Nature 428: 522-528.
- Hirst, C.E., et al. 2006. Transcriptional profiling of mouse and human ES cells identifies SLAIN1, a novel stem cell gene. Dev. Biol. 293: 90-103.
- Bugge, M., et al. 2007. Non-disjunction of chromosome 13. Hum. Mol. Genet. 16: 2004-2010.
- Hassler, M., et al. 2007. Crystal structure of the retinoblastoma protein N domain provides insight into tumor suppression, ligand interaction and holoprotein architecture. Mol. Cell 28: 371-385.
- Hsu, H.F., et al. 2007. Variable expressivity in Patau syndrome is not all related to Trisomy 13 mosaicism. Am. J. Med. Genet. A 143: 1739-1748.
- Hall, H.E., et al. 2007. The origin of Trisomy 13. Am. J. Med. Genet. A 143: 2242-2248.
- Thorslund, T., et al. 2007. BRCA2: a universal recombinase regulator. Oncogene 26: 7720-7730.
- 8. Persson, B., et al. 2009. The SDR (short-chain dehydrogenase/reductase and related enzymes) nomenclature initiative. Chem. Biol. Interact. 178: 94-98.

## **CHROMOSOMAL LOCATION**

Genetic locus: SLAIN1 (human) mapping to 13q22.3; Slain1 (mouse) mapping to 14 E2.3.

## **SOURCE**

SLAIN1 (N-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of SLAIN1 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85155 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **STORAGE**

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

## **APPLICATIONS**

SLAIN1 (N-17) is recommended for detection of SLAIN1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

SLAIN1 (N-17) is also recommended for detection of SLAIN1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SLAIN1 siRNA (h): sc-76504, SLAIN1 siRNA (m): sc-153482, SLAIN1 shRNA Plasmid (h): sc-76504-SH, SLAIN1 shRNA Plasmid (m): sc-153482-SH, SLAIN1 shRNA (h) Lentiviral Particles: sc-76504-V and SLAIN1 shRNA (m) Lentiviral Particles: sc-153482-V.

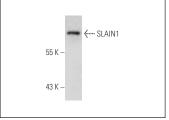
Molecular Weight of SLAIN1: 61 kDa.

Positive Controls: mouse brain extract: sc-2253.

## **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



SLAIN1 (N-17): sc-85155. Western blot analysis of SLAIN1 expression in mouse brain tissue extract.

## **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.