



LUZP1 (T-14): sc-163045

BACKGROUND

LUZP1 (leucine zipper protein 1), also known as LUZP, is a 1,076 amino acid protein that localizes to the nucleus and exists as multiple alternatively spliced isoforms. The gene encoding LUZP1 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

1. Watson, M.L., Kingsmore, S.F., Johnston, G.I., Siegelman, M.H., Le Beau, M.M., Lemons, R.S., Bora, N.S., Howard, T.A., Weissman, I.L., McEver, R.P., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. *J. Exp. Med.* 172: 263-272.
2. Sun, D.S., Chang, A.C., Jenkins, N.A., Gilbert, D.J., Copeland, N.G. and Chang, N.C. 1996. Identification, molecular characterization, and chromosomal localization of the cDNA encoding a novel leucine zipper motif-containing protein. *Genomics* 36: 54-62.
3. Blackwood, D.H., Fordyce, A., Walker, M.T., St Clair, D.M., Porteous, D.J. and Muir, W.J. 2001. Schizophrenia and affective disorders—cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. *Am. J. Hum. Genet.* 69: 428-433
4. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 601422. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Jikuya, H., Takano, J., Kikuno, R., Hirosawa, M., Nagase, T., Nomura, N. and Ohara, O. 2003. Characterization of long cDNA clones from human adult spleen. II. The complete sequences of 81 cDNA clones. *DNA Res.* 10: 49-57.
6. Weise, A., Starke, H., Mrasek, K., Claussen, U. and Liehr, T. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.
7. Hennah, W., Thomson, P., Peltonen, L. and Porteous, D. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC1 in major mental illness. *Schizophr. Bull.* 32: 409-416.
8. Marzin, Y., Jamet, D., Douet-Guilbert, N., Morel, F., Le Bris, M.J., Morice, P., Abgrall, J.F., Berthou, C. and De Braekeleer, M. 2006. Chromosome 1 abnormalities in multiple myeloma. *Anticancer Res.* 26: 953-959.

CHROMOSOMAL LOCATION

Genetic locus: LUZP1 (human) mapping to 1p36.12; Luzp1 (mouse) mapping to 4 D3.

SOURCE

LUZP1 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LUZP1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-163045 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LUZP1 (T-14) is recommended for detection of LUZP1 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); non cross-reactive with LUZP2 or LUZP4.

LUZP1 (T-14) is also recommended for detection of LUZP1 in additional species, including equine and porcine.

Suitable for use as control antibody for LUZP1 siRNA (h): sc-88399, LUZP1 siRNA (m): sc-149144, LUZP1 shRNA Plasmid (h): sc-88399-SH, LUZP1 shRNA Plasmid (m): sc-149144-SH, LUZP1 shRNA (h) Lentiviral Particles: sc-88399-V and LUZP1 shRNA (m) Lentiviral Particles: sc-149144-V.

Molecular Weight of LUZP1: 120 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.

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.