

LACE1 (S-14): sc-168403

BACKGROUND

LACE1 (lactation elevated protein 1) is a 481 amino acid protein that belongs to the AFG1 ATPase family. LACE1 is encoded by a gene mapping to human chromosome 6. Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Porphyria cutanea tarda is associated with chromosome 6 through the HFE gene which, when mutated, predisposes an individual to developing this porphyria. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatibility complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6. A bipolar disorder susceptibility locus has been identified on the q arm of chromosome 6.

REFERENCES

1. Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. *Hum. Mol. Genet.* 3: 1561-1564.
2. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
3. Cesari, R., et al. 2003. Parkin, a gene implicated in autosomal recessive juvenile parkinsonism, is a candidate tumor suppressor gene on chromosome 6q25-q27. *Proc. Natl. Acad. Sci. USA* 100: 5956-5961.
4. Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. *Genes Chromosomes Cancer* 47: 159-164.
5. Fan, J., et al. 2010. Linkage disequilibrium mapping of the chromosome 6q21-22.31 bipolar I disorder susceptibility locus. *Am. J. Med. Genet. B Neuropsychiatr. Genet.* 153B: 29-37.
6. Jalil, S., et al. 2010. Associations among behavior-related susceptibility factors in porphyria cutanea tarda. *Clin. Gastroenterol. Hepatol.* 8: 297-302.

CHROMOSOMAL LOCATION

Genetic locus: LACE1 (human) mapping to 6q21; LACE1 (mouse) mapping to 10 B2.

SOURCE

LACE1 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LACE1 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-168403 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LACE1 (S-14) is recommended for detection of LACE1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

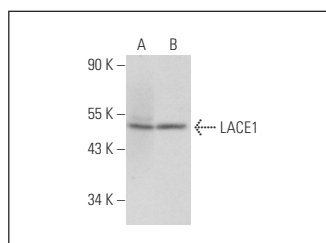
LACE1 (S-14) is also recommended for detection of LACE1 in additional species, including porcine.

Suitable for use as control antibody for LACE1 siRNA (h): sc-95180, LACE1 siRNA (m): sc-146630, LACE1 shRNA Plasmid (h): sc-95180-SH, LACE1 shRNA Plasmid (m): sc-146630-SH, LACE1 shRNA (h) Lentiviral Particles: sc-95180-V and LACE1 shRNA (m) Lentiviral Particles: sc-146630-V.

Molecular Weight of LACE1: 55 kDa.

Positive Controls: Y79 cell lysate: sc-2240 or Hep G2 cell lysate: sc-2227.

DATA



LACE1 (S-14): sc-168403. Western blot analysis of LACE1 expression in Y79 (A) and Hep G2 (B) whole cell lysates.

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.


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Try **LACE1 (C-3): sc-514632**, our highly recommended monoclonal alternative to LACE1 (S-14).