

Gros1 (E-16): sc-23009

BACKGROUND

At the epithelial/mesenchymal interface of most tissues lies the basement membrane. These thin sheets of highly specialized, extracellular matrices vary in composition in a tissue-specific manner and during development and repair. Growth suppressor Gros1, also designated leprecan, is a leucine proline-enriched basement membrane-associated proteoglycan. The gene encodes a transcript that is alternatively spliced to form two proteins, Gros1S and Gros1L. Gros1S is predominantly found in placenta, ovary and testis. The rat homolog of Gros1/leprecan is secreted by parietal yolk sac tumor (L-2) cells and is thought to be involved in the generation of substrates for protein glycosylation.

REFERENCES

1. Wassenhove-McCarthy, D.J., et al. 1999. Molecular characterization of a novel basement membrane-associated proteoglycan, leprecan. *J. Biol. Chem.* 274: 25004-25017.
2. Erickson, A.C., et al. 2000. Still more complexity in mammalian basement membranes. *J. Histochem. Cytochem.* 48: 1291-1306.
3. Kaul, S.C., et al. 2000. Gros1, a potential growth suppressor on chromosome 1: its identity to basement membrane-associated proteoglycan, leprecan. *Oncogene* 19: 3576-3583.
4. Hotta, K., et al. 2000. Characterization of Brachyury-downstream notch genes in the *Ciona intestinalis* embryo. *Dev. Biol.* 224: 69-80.
5. Aravind, L., et al. 2001. The DNA-repair protein AlkB, EGL-9, and leprecan define new families of 2-oxoglutarate- and iron-dependent dioxygenases. *Genome Biol.* 2: RESEARCH0007.

CHROMOSOMAL LOCATION

Genetic locus: LEPRE1 (human) mapping to 1p34.2; Lepre1 (mouse) mapping to 4 D2.1.

SOURCE

Gros1 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Gros1 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-23009 P, (100 µg 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

Gros1 (E-16) is recommended for detection of Gros1 of human origin and leprecan 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).

Gros1 (E-16) is also recommended for detection of Gros1 and leprecan in additional species, including equine, canine, bovine and porcine.

Molecular Weight of Gros1/leprecan: 83 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.