## 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 prolineenriched 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

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2. Erickson, A.C. and Couchman, J.R. 2000. Still more complexity in mammalian basement membranes. J. Histochem. Cytochem. 48: 1291-1306.
3. Kaul, S.C., Sugihara, T., Yoshida, A., Nomura, H. and Wadhwa, R. 2000. Gros1, a potential growth suppressor on chromosome 1: its identity to basement membrane-associated proteoglycan, leprecan. Oncogene 19: 3576-3583.
4. Hotta, K., Takahashi, H., Asakura, T., Saitoh, B., Takatori, N., Satou, Y. and Satoh, N. 2000. Characterization of Brachyury-downstream notochord genes in the Ciona intestinalis embryo. Dev. Biol. 224: 69-80.
5. Aravind, L. and Koonin, E.V. 2001. The DNA-repair protein ALKB, EGL-9, and leprecan define new families of 2-oxoglutarate- and iron-dependent dioxygenases. Genome Biol. 2: RESEARCHOOO7.

## CHROMOSOMAL LOCATION

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

## SOURCE

Gros1 (H-60) is a rabbit polyclonal antibody raised against amino acids 248-307 mapping within an internal region of Gros1 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{~g} \operatorname{lgG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ 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 (H-60) is recommended for detection of Gros1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [ $1-2 \mu \mathrm{~g}$ per 100-500 $\mu \mathrm{g}$ 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).

Gros1 (H-60) is also recommended for detection of Gros1 in additional species, including equine, canine, bovine, porcine and avian.
Suitable for use as control antibody for Gros1 siRNA (h): sc-37433, Gros1 siRNA (m): sc-37434, Gros1 shRNA Plasmid (h): sc-37433-SH, Gros1 shRNA Plasmid (m): sc-37434-SH, Gros1 shRNA (h) Lentiviral Particles: sc-37433-V and Gros1 shRNA (m) Lentiviral Particles: sc-37434-V.

Molecular Weight of Gros1/leprecan: 83 kDa .

## 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 ${ }^{\top \mathrm{M}}$ compatible goat antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz MarkerTM 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 $/ 2.0 \mathrm{ml}$ ). 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 ${ }^{\text {M }}$ Mounting Medium: sc-24941.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

