

Gros1 (F-5): sc-393003

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. and McCarthy, K.J. 1999. Molecular characterization of a novel basement membrane-associated proteoglycan, leprecan. *J. Biol. Chem.* 274: 25004-25017.
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., 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 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: RESEARCH0007.

CHROMOSOMAL LOCATION

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

SOURCE

Gros1 (F-5) is a mouse monoclonal antibody raised against amino acids 248-307 mapping within an internal region of Gros1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Gros1 (F-5) is available conjugated to agarose (sc-393003 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; for HRP (sc-393003 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393003 PE), fluorescein (sc-393003 FITC), Alexa Fluor® 488 (sc-393003 AF488), Alexa Fluor® 546 (sc-393003 AF546), Alexa Fluor® 594 (sc-393003 AF594) or Alexa Fluor® 647 (sc-393003 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393003 AF680) or Alexa Fluor® 790 (sc-393003 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

Gros1 (F-5) is recommended for detection of Gros1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

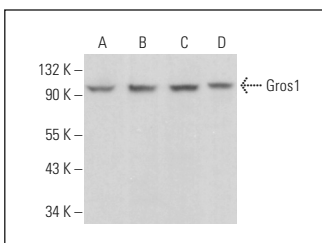
Molecular Weight of Gros1/leprecan: 83 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hs 181 Tes whole cell lysate: sc-364779 or NIH/3T3 whole cell lysate: sc-2210.

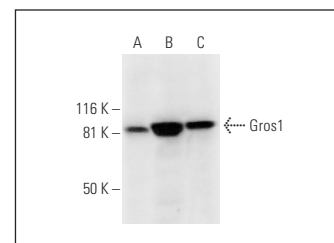
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Gros1 (F-5): sc-393003. Western blot analysis of Gros1 expression in HeLa (A), WI-38 (B), THP-1 (C) and C3H/10T1/2 (D) whole cell lysates.



Gros1 (F-5): sc-393003. Western blot analysis of Gros1 expression in HeLa (A), Hs 181 Tes (B) and NIH/3T3 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Succio, M., et al. 2015. Proteomic analysis reveals novel common genes modulated in both replicative and stress-induced senescence. *J. Proteomics* 128: 18-29.

STORAGE

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

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