# LRG1 (m2): 293T Lysate: sc-121396



The Power to Question

### **BACKGROUND**

LRG1 (leucine-rich  $\alpha$ 2-glycoprotein), also known as LRG, is a 347 amino acid secreted protein that contains 8 LRR (leucine-rich) repeats and one LRRCT domain. The leucine-rich repeat (LRR) family of proteins, including LRG1, have been shown to be involved in protein-protein interaction, signal transduction, cell adhesion and development. Found mainly in plasma, LRG1 is expressed during granulocyte differentiation. The gene that encodes LRG1 consists of nearly 3,000 bases and maps to human chromosome 19p13.3. Chromosome 19 consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (lg) superfamily members, including the killer cell and leukocyte lg-like receptors, a number of ICAMs, the CEACAM and PSG families and Fc receptors (FcRs).

### **REFERENCES**

- Haupt, H. and Baudner, S. 1977. Isolation and characterization of an unknown, leucine-rich 3.1-S-α2-glycoprotein from human serum (author's transl). Hoppe Seylers Z. Physiol. Chem. 358: 639-646.
- 2. Takahashi, N., et al. 1985. Periodicity of leucine and tandem repetition of a 24-amino acid segment in the primary structure of leucine-rich α2-glycoprotein of human serum. Proc. Natl. Acad. Sci. USA 82: 1906-1910.
- 3. O'Donnell, L.C., et al. 2002. Molecular characterization and expression analysis of leucine-rich  $\alpha$ 2-glycoprotein, a novel marker of granulocytic differentiation. J. Leukoc. Biol. 72: 478-485.
- Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611289. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 5. Shirai, R., et al. 2009. Up-regulation of the expression of leucine-rich  $\alpha$ 2-glycoprotein in hepatocytes by the mediators of acute-phase response. Biochem. Biophys. Res. Commun. 382: 776-779.
- 6. Codina, R., et al. 2010. Cytochrome c-induced lymphocyte death from the outside in: inhibition by serum leucine-rich  $\alpha$ 2-glycoprotein-1. Apoptosis 15: 139-152.
- 7. Shirai, R., et al. 2010. Autologous extracellular cytochrome c is an endogenous ligand for leucine-rich  $\alpha$ 2-glycoprotein and  $\beta$ -type phospholipase A<sub>2</sub> inhibitor. J. Biol. Chem. 285: 21607-21614.
- Watson, C.J., et al. 2011. Proteomic analysis of coronary sinus serum reveals leucine-rich α2-glycoprotein as a novel biomarker of ventricular dysfunction and heart failure. Circ. Heart Fail. 4: 188-197.
- 9. Li, Y., et al. 2011. Proteomic identification of exosomal LRG1: a potential urinary biomarker for detecting NSCLC. Electrophoresis 32: 1976-1983.

# **CHROMOSOMAL LOCATION**

Genetic locus: Lrg1 (mouse) mapping to 17 D.

# **PRODUCT**

LRG1 (m2): 293T Lysate represents a lysate of mouse LRG1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

# **APPLICATIONS**

LRG1 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive LRG1 antibodies. Recommended use: 10-20 µl per lane.

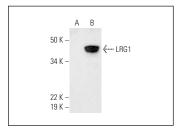
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

LRG1 (H-11): sc-393000 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse LRG1 expression in LRG1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

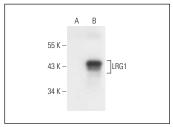
### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### DATA







LRG1 (C-5): sc-398301. Western blot analysis of LRG1 expression in non-transfected: sc-117752 (**A**) and mouse LRG1 transfected: sc-121396 (**B**) 293T whole cell Ivsates.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.