Data Sheet (Cat.No.TMPY-03966)

TargetMol

LRG1 Protein, Human, Recombinant (His)

General Information

Synonyms:	leucine-rich α-2-glycoprotein 1;LRG;leucine-rich alpha-2-glycoprotein 1;HMFT1766
Protein Construction:	A DNA sequence encoding the human LRG1 (AAH34389.1)(Met1-Gln347) was expressed with a C-terminal polyhistidine tag. Predicted N terminal: Val 36
Species:	Human
Expression Host:	HEK293 Cells
Accession:	AAH34389.1
Molecular Weight:	35.8 kDa (predicted); 44-48 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

LRG1 (Leucine-Rich Alpha-2-Glycoprotein 1) is a Protein Coding gene. LRG1 belongs to the leucine-rich repeat (LRR) family. Members of this family are involved in protein-protein interaction, signal transduction, and cell adhesion and development. LRG1 is expressed during granulocyte differentiation. It contains 4 LIM zinc-binding domains and 1 Rho-GAP domain. LRG1 is involved in promoting neovascularization (new blood vessel growth) by causing a switch in transforming growth factor-beta (TGFbeta) signaling in endothelial cells. LRG1 binds to the

accessory receptor endoglin and promotes signaling via the ALK1-Smad1/5/8 pathway. It may be a potential therapeutic target for the treatment of diseases where there is aberrant neovascularization. Diseases associated with LRG1 include Appendicitis and Normal Pressure Hydrocephalus.

Reference

O Donnell LC. et al., 2002, J Leukoc Biol. 72 (3): 478-85.
Li X. et al., 2007, Neurosci Lett. 413 (2): 141-4.
Ramachandran P. et al., 2006, J Proteome Res. 5 (6): 1493-503.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481