



Recombinant Protein Technical Manual

Recombinant Mouse LRIG1 Protein (His Tag)

RPES1215

Product Data:

Product SKU: RPES1215

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: P70193

Protein Information:

Molecular Mass: 84.5 kDa

AP Molecular Mass: 94 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Leucine-rich repeats and immunoglobulin-like domains protein 1; LIG; Lrig1

Immunogen Information:

Sequence: Ala35-Thr794

Background:

LRIG1 is a leucine-rich repeat (LRR) and Ig-like domain-containing single-pass transmembrane glycoprotein. LRIG1 shares 45-50% aa identity with its mammalian paralogs, LRIG2 and LRIG3. LRIG1 is expressed widely throughout mouse and human tissues, including the liver, brain, stomach, small intestine, skeletal muscle, cornea, and hair follicle. It has been shown to suppress tumor growth, regulate tissue homeostasis, and maintain stem cell quiescence. The LRIG1 ECD contains three C-type Ig-like domains as well as fifteen LRRs that are flanked by cysteine-rich regions. LRIG1 functions as a tumor suppressor by controlling cell proliferation through the negative regulation of the EGF family of receptor tyrosine kinases. LRIG1 expression, which is often dysregulated in human cancers, is a prognostic indicator of cancer development and relapse? Decreased LRIG1 is associated with an increase in recurrence and mortality for a variety of cancers including breast, uterine, headandneck, glioma, prostate, and squamous cell. Tissue homeostasis and stem cell dormancy is also thought to be modulated by the actions of LRIG1 on cell proliferation.