# Recombinant Protein Technical Manual

## Recombinant Mouse FLRG/Fstl3 Protein (His Tag)(Active)

**RPES5220**

## Product Data:

**Product SKU:** RPES5220

**Size:** 20µg

**Species**: Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP_113557.1

## Protein Information:

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|---|---|
| **Molecular Mass:** | 26 kDa |
| **AP Molecular Mass:** | 35-40 kDa |
| **Tag:** | C-His |
| **Bio-activity:** | 1. Measured by its binding ability in a functional ELISA. Immobilized mouse FLRG-His at 10 µg/ml (100 µl/well) can bind biotinylated human INHBA-His with a linear range of 6.25-50 ng/ml.2. Measured by its binding ability in a functional ELISA. Immobilized |
| **Purity:** | > 85 % as determined by SDS-PAGE |
| **Endotoxin:** | < 1.0 EU per µg of the protein as determined by the LAL method. |
| **Storage:** | Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months. |
| **Shipping:** | This product is provided as lyophilized powder which is shipped with ice packs. |
| **Formulation:** | Lyophilized from sterile PBS, pH 7.4 |
| **Reconstitution:** | Please refer to the printed manual for detailed information. |
| **Application:** | Functional ELISA |
| **Synonyms:** | E030038F23Rik;Flrg |

## Immunogen Information:

**Sequence:** Met 1-Val 256

## Background:

Follistatin-like 3 (FLRG/Fstl3) is a secreted glycoprotein of the follistatin-module-protein family. It may have a role in leukemogenesis. FLRG/Fstl3 is a recently described member of the FST family having an overall structure and activity profile similar to that of FST, including binding and neutralization of activin. FLRG/Fstl3 is expressed in a wide range of adult tissues, not detected in hematopoietic cells except in patients with a B cell chronic leukemia and a translocation. Isoform 1 or the secreted form is a binding and antagonizing protein for members of the TGF-beta family, such us activin, BMP2 and MSTN. Inhibits activin A-, activin B-, BMP2- and MSDT-induced cellular signaling; more effective on activin A than on activin B. Involved in bone formation; inhibits osteoclast differentiationc. Involved in hematopoiesis; involved in differentiation of hemopoietic progenitor cells, increases hematopoietic cell adhesion to fibronectin and seems to contribute to the adhesion of hematopoietic precursor cells to the bone marrow stroma. Isoform 2 of FLRG/Fstl3 or the nuclear form of FLRG/Fstl3 is probably involved in transcriptional regulation via interaction with MLLT10. Modulation of activin and other TGFβ superfamily signaling is the primary mechanism of action for both follistatin (FS) and FS-like 3 (FSTL-3). FLRG/Fstl3 is likely to be a local regulator of activin action in gonadal development and gametogenesis and, further, that activin appears to have important actions in gonadal development and function that are critical for normal reproduction.