



# Recombinant Protein Technical Manual

## Recombinant Human CSF2RA/GM-CSFR Protein (His Tag)(Active)

RPES1140

### Product Data:

**Product SKU:** RPES1140

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P15509

### Protein Information:

**Molecular Mass:** 35.5 kDa

**AP Molecular Mass:** 60 kDa

**Tag:** C-6His

**Bio-activity:** Measured by its ability to inhibit GM-CSF-dependent proliferation of TF-1 human erythroleukemic cells. The ED50 for this effect is 0.5-2 µg/ml.

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

**Endotoxin:** < 1.0 EU per µg 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°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 20mM PB,150mM NaCl,pH7.4.

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

**Application:**

**Synonyms:** Granulocyte-Macrophage Colony-Stimulating Factor Receptor Subunit Alpha; GM-CSF-R-Alpha; GMCSFR-Alpha; GMR-Alpha; CDw116; CD116; CSF2RA; CSF2R; CSF2RY

## Immunogen Information:

**Sequence:** Glu23-Gly320

## Background:

Granulocyte-Macrophage Colony-Stimulating Factor Receptor Subunit  $\alpha$  (CSF2RA) is a single-pass type I membrane protein which belongs to the type I cytokine receptor family of Type 5 subfamily. The CSF2RA gene is found in the pseudoautosomal region (PAR) of the X and Y chromosomes with some of the isoforms being membrane-bound and others being soluble. CSF2RA is a low affinity receptor for granulocyte-macrophage colony-stimulating factor. CSF2RA transduces a signal that results in the proliferation, differentiation, and functional activation of hematopoietic cells. Defects in CSF2RA are the cause of pulmonary surfactant metabolism dysfunction type 4 (SMDP4).