Recombinant Protein Technical Manual

Recombinant Human CD131/CSF2RB Protein (His Tag)(Active)

RPES2389

Product Data:

Product SKU: RPES2389

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000386.1

Protein Information:

Molecular Mass:	50 kDa
AP Molecular Mass:	50-55 kDa
Tag:	C-His
Bio-activity:	Measured by its binding ability in a functional ELISA. Immobilized human CD131 at 10 µg/ml (100 µl/well) can bind biotinylated human EPOR/Fc with a linear range of 0.16-4 µg/ml.
Purity:	> 97 % 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℃ 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:	CD131;CDw131;IL3RB;IL5RB;SMDP5

Immunogen Information:

Sequence: Met 1-Trp 443

Background:

Colony stimulating factor 2 receptor, beta, low-affinity (CSF2RB) also known as CD131 antigen (CD131), cytokine receptor common subunit beta, GM-CSF/IL-3/IL-5 receptor common beta-chain, interleukin 3 receptor/granulocyte-macrophage colony stimulating factor 3 receptor, beta (IL3RB), is the common beta chain of the high affinity receptor for IL-3, IL-5 and CSF. Defects in this protein have been reported to be associated with protein alveolar proteinosis (PAP). CD131 belongs to the type I cytokine receptor family. The cluster of differentiation (cluster of designation) (often abbreviated as CD) is a protocol used for the identification and investigation of cell surface molecules present on white blood cells initially but found in almost any kind of cell of the body, providing targets for immunophenotyping of cells. Defects in CD131/CSF2RB are the cause of pulmonary surfactant metabolism dysfunction type 5 (SMDP5). SMDP5 is a rare lung disorder due to impaired surfactant homeostasis. It is characterized by alveolar filling with floccular material that stains positive using the periodic acid-Schiff method and is derived from surfactant phospholipids and protein components. Excessive lipoproteins accumulation in the alveoli results in severe respiratory distress.