Product Name: Mouse CSF2RA Protein Dimer, His-Avi Tag

Product Code: CSP-25179-03

FOR RESEARCH USE ONLY (RUO)

Protein Name: CSF2R

Alternate Name(s): granulocyte-macrophage colony-stimulating factor receptor alpha, GMCSFR-alpha, GMRα subunit, Cluster of Differentiation 116, CD116, CDw116, CSF2R, CSF2RAX, CSF2RAY, CSF2RX, CSF2RY, GM-CSF-R-alpha, GMCSFR, GMR, SMDP4, alphaGMR, GMR-alpha

Expression Host
HEK293T

Amino Acid Range
1: L30-P327

Protein Construct
Recombinant mouse CSF2RA dimer protein (CSP-25179-03) is bioactive. Expressed in HEK293T cell line.

SDS-Page Molecular Weight
84 kDa. The migration range of the heterodimer protein with glycosylation under non-reducing conditions is between 120 and 190 kDa on SDS PAGE.

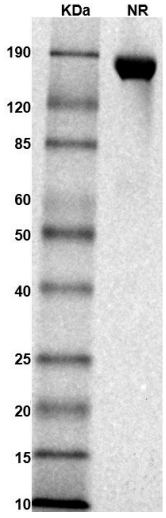
Purity
Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Formulation
0.22μm filtered PBS, pH 7.4

Stability & Storage
-80^{0}C

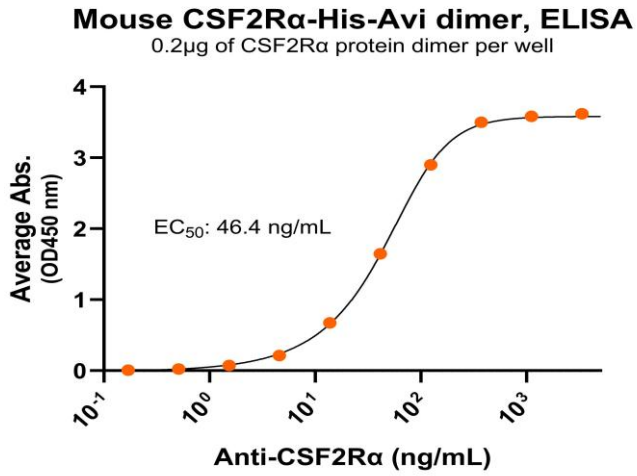
Shipping Conditions
Frozen Dry Ice

SDS-PAGE



MW: Molecular Weight marker reduced condition
NR: CSF2Rα dimer under non-reduced condition
The migration range of the heterodimer protein with glycosylation under non-reducing conditions is between 120 and 190 kDa on SDS PAGE.

Antibody Binding



Immobilized mouse CSF2Rα protein dimer, His Tag (Cat No. CSP-25179-03) at 2 μg/mL (100 μL/well) can bind anti-mouse CSF2Rα polyclonal antibody with half maximal effective concentration (EC50) range of 23.2-92.9 ng/mL (QC tested).

Background

Colony stimulating factor 2 receptor subunit alpha (CSF2RA) is a Type 1 transmembrane glycoprotein. CSF2RA is also known as granulocyte-macrophage colony-stimulating factor receptor alpha (GMCSFR-alpha), GMRα subunit, and cluster of differentiation 116 (CD116). The CSF2RA extracellular domain contains two fibronectin type III (FN III) domains with a highly conserved WSXWS motif is present near the C-terminus of the second domain. CSF2RA is expressed on (cell types). CSF2RA is primarily located on neutrophils, eosinophils and monocytes/macrophages and is a receptor for granulocyte-macrophage colony-stimulating factor (GM-CSF). CSF2RA can form a heterodimer with CSF2RB and these heterodimers can form several multimers including a dodecamer. It has been found that CSF2RA specifically has tumor suppression characteristics that have made stimulating CSF2RA expression an emerging strategy in cancer therapy. While structurally and functionally similar to human CSF2RA homodimer, mouse CSF2RA homodimer is a species-specific tool essential for preclinical studies, basic research, and translational research.