Product Name: Bioactive, Human IFNγ R1 Protein Dimer, His Tag

Product Code: CSP-24015-01

FOR RESEARCH USE ONLY (RUO)

Protein Name: IFNγ R1/CD119, Protein Dimer

Alternate Name(s): CD119, IFNγR, IMD27A, and IMD27B

Expression Host
HEK293T

Amino Acid Range
Glu18-Gly245

Protein Construct
IFNγR1 protein dimer contains IFNγR1 2 extracellular domains (UniProt# P15260) with a homodimer motif and a His tag at the C-terminus. Expressed in HEK293T cell line.

SDS-Page Molecular Weight
98 kDa. The migration range of the dimer under non-reducing condition is 90-120 kDa on SDS PAGE.

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

Shipping Conditions
Product is shipped at ambient temperature.

Formulation
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4 with 10% trehalose as a protectant

Stability & Storage
On receipt, store at -20 C or lower for long term storage.
This product is stable at:
-20 to -70 C for 12 months from date of receipt in lyophilized state.
-70 C for 3 months after reconstitution under sterile conditions.
Avoid repeated freeze-thaw cycles

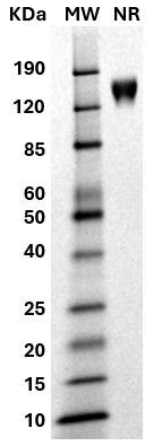
Reconstitution of lyophilized product
For best performance, we strongly recommend you reconstitute the lyophilized product with deionized water to a stock solution of 500 μg/mL.

Solubilize for 20 minutes at room temperature with occasional gentle mixing. Avoid shaking or vortexing.

For 25μg product size:
Reconstitute with 50 μL sterile deionized water.

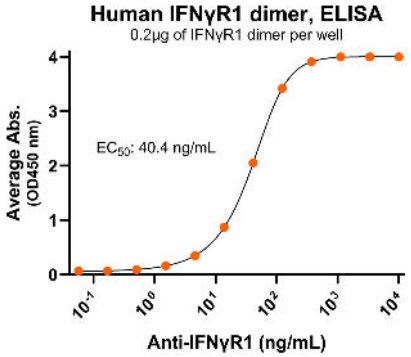
For 100μg product size:
Reconstitute with 200 μL sterile deionized water.

SDS-PAGE



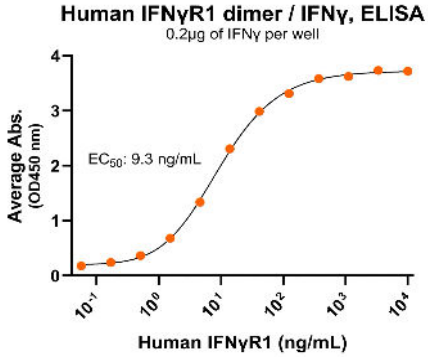
MW: Molecular Weight marker reduced condition
NR: IFNγR1 dimer under non-reduced condition
The migration range of the dimer under non-reducing condition is 90-120 kDa on SDS PAGE.

Antibody Binding



Immobilize human IFNγR1 dimer protein (Cat. No. CSP24015-01) at 2 μg/mL (100 μL/well) can bind anti-human IFNγR1 monoclonal antibody with half maximal effective concentration (EC50) range of 20.2-80.8 ng/mL (QC tested).

Ligand Binding



Immobilize human IFNγ protein at 2 μg/mL (100 μL/well) can bind IFNγR1 dimer protein (Cat. No. CSP-24015-01) with half maximal effective concentration (EC50) range of 4.7-18.6 ng/mL (QC tested).

Background
Interferon gamma receptor 1 (IFNγR1), also known as CD119, IMD27A and IMD27B, is a subunit of interferon gamma receptor (IFNγR). IFNγR belongs to the type II cytokine receptor family. IFNγR1 is a type I integral membrane glycoprotein containing extracellular, transmembrane and intracellular domains. The extracellular domain has two immunoglobulin-like (Ig-like) C2-type domains. The interferon gamma (IFNγ) dimer interacts with two IFNγR1 molecules to activate the cascade signaling pathway.