

IFN-γ R II

Catalog # PVGS1343

Specification

IFN-γ R II - Product Information

Primary Accession Species Human <u>P38484</u>

Sequence Ser28-Gln247

Purity > 95% as analyzed by SDS-PAGE

Endotoxin Level < 0.2 EU/ μg of protein by gel clotting method

Biological Activity

ED₅₀ < 0.1 μ g/ml, measured in a cell cytotoxicity assay using HT-29 (HTB-38) cells in the presence of 1.0 ng/ml human IFN-gamma.

Expression System CHO

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 µg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

IFN-γ R II - Additional Information

Gene ID 3460

Other Names Interferon gamma receptor 2 {ECO:0000312|HGNC:HGNC:5440}, IFN-gamma receptor 2, IFN-gamma-R2, Interferon gamma receptor accessory factor 1, AF-1, Interferon gamma receptor beta-chain, IFN-gamma-R-beta, Interferon gamma transducer 1 {ECO:0000312|HGNC:HGNC:5440}, IFNGR2 (HGNC:5440)



Target Background

IFN-gamma Receptor II, also known as IFNGR2 and IFNGT1, is a transmembrane protein belonging to the type II cytokine receptor family. IFNGR2 is a non-ligand-binding beta chain of the IFN-gamma receptor. It is an integral part of the IFN-gamma signaling transduction pathway and is likely to interact with GAF, JAK1 and JAK2. Defects in IFNGR2 are a cause of autosomal recessive Mendelian susceptibility to mycobacterial disease (MSMD), also known as familial disseminated atypical mycobacterial infection.

IFN-γ R II - Protein Information

Name IFNGR2 (HGNC:5440)

Function

Associates with IFNGR1 to form a receptor for the cytokine interferon gamma (IFNG) (PubMed:7615558, PubMed:7673114, PubMed:8124716). Ligand binding stimulates activation of the JAK/STAT signaling pathway (PubMed:15356148, PubMed:7673114, PubMed:7673114, PubMed:8124716, PubMed:8124716, PubMed:8124716, PubMed:7673114, PubMed:8124716, PubMed:7673114, PubMed:7673114). Required for signal transduction in contrast to other receptor subunit responsible for ligand binding (PubMed:7673114).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cytoplasmic vesicle membrane; Single-pass type I membrane protein. Golgi apparatus membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Cytoplasm. Note=Has low cell surface expression and high cytoplasmic expression in T cells. The bias towards cytoplasmic expression may be due to ligand-independent receptor internalization and recycling.

Tissue Location

Expressed in T-cells (at protein level).

IFN-γ R II - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

IFN-γ R II - Images