IFN-gamma R2 Protein, Mouse (HEK293, His)

Cat. No.:	HY-P74852
Synonyms:	Interferon gamma receptor 2; IFN-γ Receptor II; IFNGR2; IFNGT1
Species:	Mouse
Source:	HEK293
Accession:	Q63953/NP_032364 (A20-V243)
Gene ID:	15980
Molecular Weight:	40-45 kDa

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background

IFN-gamma R2, one of the subunit of IFN-gamma receptor, is a receptor for IFN-gamma. IFN-gamma R2. IFN-gamma R2 is highly expressed on myeloid cells, moderately on B cells and low on T cells, and the expression is regulated by the state of cellular differentiation or activation[2].

IFN-gamma R2 can associate with IFN-gamma R1 to form a functional receptor. Upon binding with IFN-gamma, IFN-gamma R2 and IFN-gamma R1 oligomerize and transphosphorylate[1]. Then, JAK1 and JAK2 are phosphorylated and activated, creating a binding site for STAT1. STAT1 is recruited to the receptor complex and leads to the phosphorylation. Phosphorylated STAT1 translocates to the nucleus, where it regulates the expression of IFN-responsive genes (e.g. CD54). IFN-gamma R2 is important for innating immune defense against mycobacterial infections. Defects in IFN-gamma R2 causes mendelian susceptibility to mycobacterial disease (MSMD)[2].

Human IFN-gamma R2 consists of extracellular domain (S28-Q247), helical domain (V248-F268), and cytoplasmic domain (L269-L337).

IFN-gamma R2 plays a critical role in antimicrobial, and immune responses[2].

REFERENCES

[1]. Castro F, et al. Interferon-Gamma at the Crossroads of Tumor Immune Surveillance or Evasion. Front Immunol. 2018 May 4;9:847.

[2]. van de Vosse E, et al. IFN-γR1 defects: Mutation update and description of the IFNGR1 variation database. Hum Mutat. 2017 Oct;38(10):1286-1296.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA