

IFN-gamma R1/CD119 Protein, Human (HEK293, His-Flag)

Cat. No.:	HY-P700611
Synonyms:	Interferon gamma receptor 1; IFN-gamma-R1; IFN-gamma-R-alpha; CD119; Ifngr1
Species:	Human
Source:	HEK293
Accession:	P15260 (E18-G245)
Gene ID:	3459
Molecular Weight:	29 kDa

PROPERTIES

AA Sequence	<pre> EMGTADLGPS SVPTPTNVTI ESYNMNPIVY WEYQIMPQVP VFTVEVKNYG VKNSEWIDAC INISHHYCNI SDHVGDP SNS LWVRVKARVG QKESAYAKSE EFAVCRDGKI GPPKLDIRKE EKQIMIDIFH PSV FVNGDEQ EVDYDPETTC YIRVYNVYVR MNGSEIQYKI LTQKEDDCDE IQCQLAIPVS SLNSQYCVSA EGLVHVWGV T TEKSKEVCIT IFNSSIKG </pre>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>IFN-gamma R1 (CD119) serves as the receptor subunit for interferon gamma (IFNG), playing pivotal roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation. Teaming up with the transmembrane accessory factor IFNGR2, IFNGR1 forms a functional receptor complex. Upon IFNG binding, the intracellular domain of IFNGR1 undergoes conformational changes, allowing the association of downstream signaling components, including JAK1 and JAK2. Activated JAK1 phosphorylates IFNGR1, creating a docking site for STAT1. Subsequent phosphorylation of STAT1 leads to dimerization, translocation to the nucleus, and stimulation of target gene transcription. IFNGR1 also facilitates the activation of STAT3, albeit to a lesser extent. Furthermore, the phosphorylated</p>
------------	---

IFNGR1 domain provides a docking site for SOCS1, which regulates the JAK-STAT pathway by competing with STAT1 for binding to IFNGR1. IFNGR1 can exist as a monomer and forms a heterodimer with IFNGR2 to constitute the IFNG receptor complex. The receptor also interacts with JAK1, STAT1, and SOCS1, orchestrating a complex signaling network in response to IFNG.

Caution: Product has not been fully validated for medical applications. For research use only.

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