

Active Recombinant Human Interferon Gamma Receptor 1, Fc Chimera

Cat. No. IFNGR1-22H **Lot. No.** (See product label)

SPECIFICATION

Product Overview Recombinant Human Interferon Gamma Receptor 1 encoding the signal peptide and extracellular domain of human IFN-gamma R1 (aa 1-245) chain was fused to the Fc region of human IgG1 (aa 93-330). The chimeric protein was expressed in modified *human 293 cells*.

Species Human

Source HEK293

ProteinLength 1-245 a.a.

Description Interferon-gamma (IFN-gamma) is a pleotropic cytokine expressed predominantly by naïve and activated CD8+ and TH1 CD4+ T cells, and natural killer (NK) cells and, as such, promotes both innate and adaptive immune responses. The activity of IFN-gamma is mediated through its receptor, the high-affinity IFN-gamma receptor complex, a class II cytokine receptor that is present on T cells, B cells, macrophages, neutrophils and NK cells as well as non-immune somatic cells such as endothelial cells and fibroblasts.

Amino Acid Sequence EMGTADLGPSSVPTPTNVITIESYMNPIVYWEYQIMPQVPVFTVEVKNYGVKNSEWI
DACINISHHYCNISDHVGDPSNSLWVRVKARVGQKESAYAKSEEFVCRDGGKIGPPK
LDIRKEEKQIMIDIFHPSVFNVDGDEQVVDYDPETTCYIRVYNVYVRMNGSEIQYKILTQ
KEDDCDEIQCQLAIPVSSLNSQYCVSAEGLVHWGVTTEKSKEVCITIFNSSIKGGSS

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NTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVIV
 DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEY
 KCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDI
 AVEWESNGQPENNYKTTTPVLDSGDGSFFLYSKLTVDKSRWQQGNVFSVSMHEAL
 HNHYTQKSLSLSPGK.

Molecular Mass	IFN-gamma R1 – Fc Chimera migrates as a broad band between 60 and 85 kDa on SDS-PAGE due to post-translation modifications, in particular glycosylation.
pI	IFN-gamma R1 – Fc Chimera separates into a number of glycoforms with a pI between 5 and 8 in 2D PAGE due to post-translational modifications, in particular glycosylation.
% Carbohydrate	Purified IFN-gamma R1 – Fc Chimera consists of 10-35% carbohydrate by weight.
Glycosylation	IFN-gamma R1 – Fc Chimera has N- and possibly O-linked oligosaccharides.
Purity	>95%, as determined by SDS-PAGE and visualized by Coomassie Brilliant Blue.
Formulation	When reconstituted in 0.5 ml sterile phosphate-buffered saline, the solution will contain 1% human serum albumin (HSA) and 10% trehalose.
Reconstitution	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial.
Storage	Lyophilized products should be stored at 2 to 8°C. Following reconstitution short-term storage at 4°C is recommended, and longer-term storage of aliquots at -18 to -20°C. Repeated freeze thawing is not recommended.
Activity	The ED50 of IFN-gamma R1 – Fc Chimera is typically 0.05-0.1 µg/ml as measured by

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its ability to neutralize IFN gamma mediated cytotoxicity using the HT-29 colorectal adenocarcinoma cell line.

GENE INFORMATION

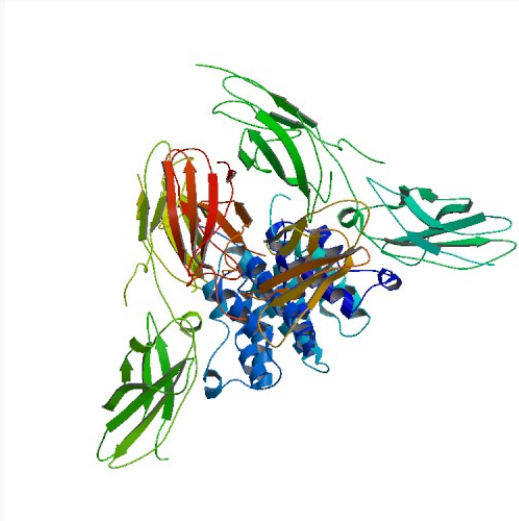
Gene Name	IFNGR1 interferon gamma receptor 1 [Homo sapiens]
Synonyms	IFNGR1; interferon gamma receptor 1; CD119; IFNGR; FLJ45734; AVP, type 2; CD119 antigen; immune interferon receptor 1; interferon-gamma receptor alpha chain; IFN-gamma-R1; OTTHUMP00000017285; interferon gamma receptor 1
Gene ID	3459
mRNA Refseq	NM_000416
Protein Refseq	NP_000407
UniProt ID	P15260
Chromosome Location	6q23-q24
MIM	107470
Pathway	Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway; Natural killer cell mediated cytotoxicity
Function	cytokine binding; interferon-gamma receptor activity; receptor activity

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