

Interferon Gamma Receptor 2 (IFNGR2) Active Protein | IFNGR2 active protein

Active Interferon Gamma Receptor 2 (IFNGR2)

CATALOG # AAA161936	HOST 293F cell	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Interferon Gamma Receptor 2 (IFNGR2); Active Interferon Gamma Receptor 2 (IFNGR2); Interferon Gamma Receptor 2; IFNGR2 active protein (eukaryotic; 293F cell); Human; IFNGT1; AF-1; Interferon Gamma Transducer 1; Interferon gamma receptor accessory factor 14; IFNGR2 active protein

PRODUCT SPECIFICATIONS

Host	293F cell
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met1~Gln24 7
Applicable Applications for IFNGR2 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Eukaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.7
Research Area	CD & Adhesion molecule
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

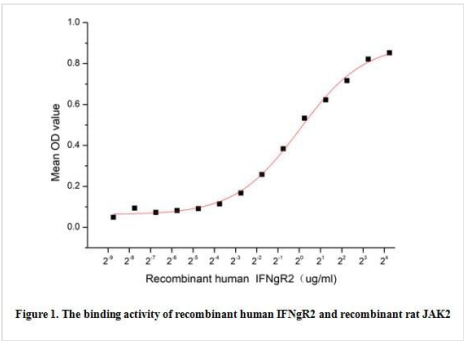


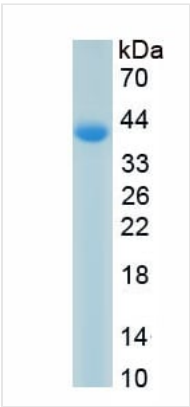
Figure 1. The binding activity of recombinant human IFNγR2 and recombinant rat JAK2

Bioactivity

IFNgamma R2 (Interferon gamma receptor 2; also called IFN gamma R beta IFN gamma RII, or AF1) is a 6064 kDa type I transmembrane glycoprotein that is a member of the class II cytokine receptor family of molecule). It is highly expressed on the surfaces of myeloid cells, moderately expressed on B cells, and poorly expressed on the surfaces of T cells. IFNgammaR2 is a cell-surface receptor that is required for interferon-gamma signalling and therefore plays a critical immunoregulatory role in innate and adaptive immunity against viral and also bacterial and protozoal infections. IFNγR2 have been confirmed to mediate downstream JAK-STAT signaling pathway in mammals. It is widely expressed as part of a preassembled cell surface multimeric complex. In the absence of IFNgamma, the complex contains two each of IFNgamma R1, R2 and Jak1 molecules. Binding of IFNgamma to IFNgamma R1 recruits Jak2 to IFN-gamma R2 and initiates phosphorylation, STAT1 binding, conformational changes and transcriptional regulation, which mainly inhibits proliferation and/or promotes apoptosis. A functional binding ELISA assay was conducted to detect the interaction of recombinant human IFNγR2 and recombinant rat JAK2. Briefly, biotin-linked IFNγR2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to JAK2-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 ul stop solution to the wells and read at 450 nm immediately. The binding activity of IFNγR2 and JAK2 was shown in Figure 1, the EC50 for this effect is 1.02 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for IFNγR2 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	47419934
NCBI GeneID	3460
NCBI Accession #	NP_005525.2
NCBI GenBank Nucleotide #	NM_005534.3
UniProt Accession #	P38484; Q9BTL5
Molecular Weight	37,806 Da
NCBI Official Full Name	interferon gamma receptor 2
NCBI Official Synonym Full Names	interferon gamma receptor 2 (interferon gamma transducer 1)
NCBI Official Symbol	IFNGR2
NCBI Official Synonym Symbols	AF-1; IFGR2; IFNGT1
NCBI Protein Information	interferon gamma receptor 2; IFN-gamma-R2; IFN-gamma receptor 2; interferon gamma transducer 1; interferon gamma receptor beta chain; interferon gamma receptor accessory factor 1; interferon gamma receptor accessory factor-1

UniProt Protein Name	Interferon gamma receptor 2
UniProt Gene Name	IFNGR2
UniProt Synonym Gene Names	IFNGT1; IFN-gamma receptor 2; IFN-gamma-R2; AF-1
UniProt Entry Name	INGR2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/293f-cell-active-protein/interferon-gamma-receptor-2-ifngr2/161936>