

Recombinant Human Interferon, Alpha 2, HQ-tagged

Cat. No. IFNA2-139H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human IFNA2molecular weight was 24 KDa.
Species	Human
Source	Barley Grain
Description	As a result of glycosylation, the recombinant protein migrates with an apparent molecular mass of 24 kDa in SDS-PAGE. Recombinant human IFNA2a contains 166 amino acids and a 16 a.a. HQ tag for a total length of 182 a.a. and has a predicted molecular mass of 21.5 kDa including HQ tag.
Form	Sterile filtered through a 0.2 µm filter. Lyophilized from PBS, pH 7.2.
Molecular Weight	24 kDa
Purity	> 95% by SDS-PAGE gel analysis. Purified product carries no pyrogenic or proinflammatory contaminants, as assayed with monocyte activation test using Human 10-plex Cytokine Assay measuring IL-6, TNF-alpha and IL-1beta induction.
Endotoxin Level	Endotoxin level is less than 0.005 ng per µg of product (0.05 EU/µg) as measured by turbidimetric kinetic assay. Purified IFNA2a carries no pyrogenic or proinflammatory contaminants, as assayed with monocyte activation test using Human 10-plex Cytokine Assay measuring IL-6, TNF-alpha and IL-1beta induction.
Biological Activity	Bioactivity is assayed by measuring the dose dependent cytotoxicity of human IFNA2a

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on TF-1 in the presence of IL-4. The ED50 for this batch of recombinant human IFNA2 was determined to be 0.108 ng/ml, corresponding to specific activity of 9.26 x 10⁶ U/mg.

Specific Activity 9.26 x 10⁶U/mg

Reconstitution Always centrifuge the vial before opening. It is recommended to reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 µg/ml. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please note that the addition of any carrier protein into this product may produce unwanted endotoxin. This depends upon the particular application employed.

Storage The lyophilized protein, though stable at room temperature for few weeks, is best stored at -20°C. Reconstituted protein should be used immediately or stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.

Official Symbol IFNA2

GENE INFORMATION

Gene Name IFNA2 interferon, alpha 2 [[Homo sapiens](#)]

Synonyms IFNA2; interferon, alpha 2; IFNA; INFA2; MGC125764; MGC125765; IFN-alphaA; interferon alpha-2; IeIF A; IFN-alpha-2; OTTHUMP00000021143; interferon alpha A; alpha-2a interferon; interferon alpha2b

Gene ID [3440](#)

mRNA Refseq [NM_000605](#)

Protein Refseq [NP_000596](#)

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MIM	147562
UniProt ID	P01563
Chromosome Location	9p22
Pathway	Autoimmune thyroiddisease; Cytokine Signaling in Immune system; Cytosolic DNA-sensing pathway;Factors involved in megakaryocyte development and platelet production;Hemostasis; Hepatitis C; Herpes simplex infection; Immune System; InfluenzaA; Innate Immune System; Interferon Signaling; Interferon alpha/betasignaling; Jak-STAT signaling pathway; Natural killer cell mediatedcytotoxicity; Regulation of autophagy
Function	cytokine activity;interferon-alpha/beta receptor binding; protein binding
PDB rendering basedon 1itf.	

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