

IFN-alpha 4/IFNA4 Protein, Human (sf9, His)

Cat. No.:	HY-P75822
Synonyms:	Interferon alpha-4; Interferon alpha-76; IFNA4
Species:	Human
Source:	Sf9 insect cells
Accession:	P05014 (M1-D189)
Gene ID:	3441
Molecular Weight:	Approximately 20 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20 mM Tris, 500 mM NaCl, pH 7.4, 10% Glycerol. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
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-alpha 4 (IFNA4; IFN-α4), belongs to the alpha/beta interferon (IFN) family, is produced by the macrophages with antiviral activities. Interferon (IFN) is originally identified as a substance ‘interfering’ with viral replication in vitro. IFN-α/β and related molecules are classified as type I IFNs, as for the other two types of type II IFN (IFN-γ) and type III IFNs (IFN-λ), respectively^[1].</p> <p>Interferon alpha (IFNα) shows significant biological activity in various cancers, particularly haematological malignancies such as hairy cell leukaemia and chronic myelogenous leukaemia^[2].</p> <p>IFN-alpha 4 is the subtypes dominates in IFN-alpha, whose the response with IFNA5, IFNA7, and IFNA14 accounting for up to 85% of the subtypes expressed by Peripheral blood mononuclear cells (PBMCs)^[3].</p> <p>IFN-alpha 4 is promoted by interferon (IFN) regulatory factors (IRFs), especially IRF-1 and IRF-7^{[5][6]}. And it exhibits function by inhibiting virus RNA replication and enhances human natural killer cytotoxicity against virus^{[4][7]}.</p> <p>As for a wildy use of IFN in animal model, the sequence of amino acids in IFNA4 protein of human is very different from mouse (57.07%) and rat (57.98), respectively.</p>
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REFERENCES

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