IFN-alpha 4/IFNA4 Protein, Human (HEK293, His)

Cat. No.:	HY-P72615
Synonyms:	Interferon alpha-4; Interferon alpha-4B; Interferon alpha-76; Interferon alpha-M1; IFNA4
Species:	Human
Source:	HEK293
Accession:	P05014 (C24-D189)
Gene ID:	3441
Molecular Weight:	Approximately 20 kDa

PROPERTIES

AA Sequence	C D L P Q T H S L G N R R A L I L L A Q M G R I S H F S C L K D R H D F G F P E E E F D G H Q F Q K A Q A I S V L H E M I Q Q T F N L F S T E D S S A A W E Q S L L E K F S T E L Y Q Q L N D L E A C V I Q E V G V E E T P L M N E D S I L A V R K Y F Q R I T L Y L T E K K Y S P C A W E V V R A E I M R S L S F S T N L Q K R L R R K D
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
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	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]. Interferon alpha (IFNa) shows significant biological activity in various cancers, paticularly haematological malignancies such as hairy cell leukaemia and chronic myelogenous leukaemia[2]. 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].
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].
As for a wildly 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.

REFERENCES

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