PrimeGene a biotechne brand

Recombinant Human Interferon-alpha1a (rHuIFN-α1a)

PrimeGene Technical Data Sheet

Catalog Number:	106-01
Source:	Escherichia coli.
Molecular Weight:	Approximately 19.5 kDa, a single non-glycosylated polypeptide chain containing 167 amino acids.
Quantity:	20µg/100µg/1000µg
AA Sequence:	MCDLPETHSL DNRRTLMLLA QMSRISPSSC LMDRHDFGFP QEEFDGNQFQ KAPAISVLHE
	LIQQIFNLFT TKDSSAAWDE DLLDKFCTEL YQQLNDLEAC VMQEERVGET PLMNADSILA
	VKKYFRRITL YLTEKKYSPC AWEVVRAEIM RSLSLSTNLQ ERLRRKE
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The specific activity determined by an anti-viral
	assay is no less than 1.0×10^8 IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4, containing 3 % Mannitol, 5 % Trehalose,
	0.05 % Tween-80.
Endotoxin:	Less than 0.1 EU/ μ g of rHuIFN- α 1a as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the
,	bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a
	concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and
	stored at \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature
	recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
	• 12 months from date of receipt, -20 to -70 °C as supplied.
	• 1 month, 2 to 8 °C under sterile conditions after reconstitution.
	• 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further
	evaluation purposes. NOT FOR HUMAN USE.

Human Interferon-alpha1a

Interferon alpha-1, also named interferon alpha-D, is belonging to the type I interferon family and is encoded by the IFNA1gene in humans. Interferon alpha-1 is expressed in peripheral blood leukocytes and lymphoblastoid cells. IFN α -1 contains four highly conserved cysteine residues which form two disulfide bonds, one of which is necessary for biological activity. It plays an important role in inducing non-specific resistance against a broad range of viral infections, and also affects cell proliferation and modulates immune responses.

IFN α -1a and IFN α -1b are two forms of interferon alpha-1 except for the substitution of alanine for value at position 137. Interferon-alpha represents a group of related but distinct proteins that share over 95 % amino acid sequence homology.

Website: www.primegene.com Fax: +86 21 61077348