

Recombinant Human Interferon-alpha4a, Yeast

#R00159

Size: 10 µg/100 µg/500 µg

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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Interferon-alpha (IFN-alpha), also known as leukocyte interferon, represents a group of related but distinct proteins that share over 95% amino acid sequence homology. They are mainly involved in innate immune response against viral infection. The IFN- α family has 13 subtypes and 23 different variants. The individual proteins have molecular masses between 19-26 kDa and consist of proteins with lengths of 156-166 and 172 amino acids. All IFN- α subtypes possess a common conserved sequence region between amino acid positions 115-151 while the amino-terminal ends are variable. Interferon-alpha 4 (IFNA4) belongs to the alpha interferon family. IFNA4 is a secreted protein and produced by macrophages. Two variants of IFNA4 (IFNA4a and IFNA4b) are known, which differ from each other by changes in their coding regions at nucleotide positions 220 and 410.

AA Sequence

CDLPQTHSLGNRRALILLAQMGRISHFSCLKDRHDFG
FPEEEFDGHQFQKAQAISVLHEMIQQTfNLFSTEDSS
AAWEQSLLEKFSTELYQQLNLEACVIQEVGVEETPL
MNEDSILAVRKYFQRITLYLTEKKYSPCAWEVVRAEIM
RSLSFSTNLQKRLRRKD

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.

Product Specification

Species	Human
Source	Yeast
Molecular Weight	Approximately 19.4 kDa, a single polypeptide chain containing 166 amino acids.
Purity	> 95 % by SDS-PAGE analyses.
Biological Activity	Test in processing.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.0.
Endotoxin	Less than 1 EU/µg of rHuIFN- α 4a, Yeast as determined by LAL method.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.