Data Sheet (Cat.No.TMPJ-00745)

TargetMol

IFN-alpha 2a/IFNA2 Protein, Human, Recombinant

General Information

Synonyms:	Interferon α-2;IFNA2;IFN α2a;IFN-α-2;IFN-Alpha-2;Interferon Alpha-2;LeIF A;Interferon α-A;Interferon Alpha-A
Protein Construction:	Cys24-Glu188(Arg46Lys)
Species:	Human
Expression Host:	E. coli
Accession:	P01563
Molecular Weight:	16 KDa (reducing condition)
AA Sequence:	Cys24-Glu188(Arg46Lys)

QC Testing

Biological Activity:	Loaded Human IFNAR2-Fc on Protein A Biosensor, can bind Human IFN alpha2a with an affinity constant of 1.95 nM as determined in BLI assay. (Regularly tested)
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM PB, 150 mM NaCl, pH 7.2.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

At least 23 different variants of IFN-α are known. 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. Many IFN-α subtypes only differ in their sequences by one or two positions. Naturally occurring variants also

include proteins truncated by 10 amino acids at the carboxy-terminal end.