

IFN β 1a/IFNB1, Human, Recombinant

Cat. No. : PCK276

General Information

Synonyms	IFNB1;Type I Interferon
Species	Human
Expression host	E.coli
Sequence	MSYNLLGFLQRSSNFQCQKLLWQLNGRLEYCLKDRMNFDIPEEIKQLQQFQKEDAALTIYEML QNIFAIFRQDSSSTGWNETIVENLLANVYHQINHLKTVLEEKLEKEDFTRGKLMSSLHLKRYYG RILHYLKAKEYSHCAWTIVRVEILRNFYFINRLTGYLRN with polyhistidine tag at the C-terminus.
Accession	P01574.1
Tag	His-tag at the C-terminus
Mol mass	20.84 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce apoptosis in HeLa cells.The ED50 for this effect is < 15 ng/mL. Measure by its ability to induce cytotoxicity in TF-1 cells. The ED50 for this effect is < 0.1 ng/mL. The specific activity of recombinant human IFN beta 1a is approximately > 1 × 10 ⁷ IU/mg.

Product feature

Purity	> 98% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

Interferon-beta is, a cytokine, released by fibroblasts and pathogen-exposed dendritic cells, macrophages, and endothelial cells. IFN beta 1a conducts through the heterodimeric IFN-alpha/beta Receptor. IFN-beta-deficient mice are easier to suffer from experimental autoimmune encephalomyelitis (EAE), a disease model of human multiple sclerosis (MS).In addition, IFN-beta has been proved to suppress the Th17 cell response in both MS and EAE and is usually used to treat MS disease.

SDS-PAGE

