IL-1α/IL1F1, Human, Recombinant

Cat. No. : PCK045

General Information

Synonyms	Hematopoietin-1;Lymphocyte-Activating Factor (LAF);Endogenous Pyrogen (EP); Leukocyte
Species	Human
Expression host	E.coli
Sequence	MSAPFSFLSNVKYNFMRIIKYEFILNDALNQSIIRANDQYLTAAALHNLDEAVKFDMGAYKSSK DDAKITVILRISKTQLYVTAQDEDQPVLLKEMPEIPKTITGSETNLLFFWETHGTKNYFTSVAHP NLFIATKQDYWVCLAGGPPSITDFQILENQA with polyhistidine tag at the C-terminus.
Accession	P01583.1
Tag	His-tag at the C-terminus
Mol mass	18.99 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce D10.G4.1 cells proliferation.The ED50 for this effect is < 10 pg/mL. The specific activity of recombinant human IL-1 alpha is approximately > 1 ×10^8 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

Interleukin 1 alpha (IL-1α) also known as hematopoietin 1 is a cytokine of the interleukin 1 family that in humans is encoded by the IL1A gene. IL-1α is produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. It binds to the interleukin-1 receptor. It is on the pathway that activates tumor necrosis factor-alpha.