

## IL-1 $\alpha$ /IL1F1, Mouse, Recombinant

Cat. No. : PCK046

### General Information

<b>Synonyms</b>	Hematopoietin-1;Lymphocyte-Activating Factor (LAF);Endogenous Pyrogen (EP); Leukocyte
<b>Species</b>	Mouse
<b>Expression host</b>	E.coli
<b>Sequence</b>	MSAPYTYQSDLRYKLMKLVQRKFVMNDSLNTIYQDVDKHYLSTTWLNDLQQEVKFDMYAY SSGGDDSKYPVTLKISDSQLFVSAQGEDQPVLLKELPETPKLITGSETDLIFFWKSINSKNYFTS AAYPELFATKEQSRVHLARGLPSMTDFQIS with polyhistidine tag at the C-terminus.
<b>Accession</b>	P01582.1
<b>Tag</b>	His-tag at the C-terminus
<b>Mol mass</b>	18.93 kDa
<b>Expiration date</b>	12 months
<b>Bio activity</b>	Measure by its ability to induce D10.G4.1 cells proliferation.The ED50 for this effect is < 5 pg/mL. The specific activity of recombinant mouse IL-1 alpha is > 2 × 10 <sup>8</sup> IU/mg.

### Product feature

<b>Purity</b>	> 95% as determined by SDS-PAGE. Ni-NTA chromatography.
<b>Endotoxin (EU/<math>\mu</math>g)</b>	< 0.1
<b>Storage</b>	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.
<b>Shipping</b>	Ice bag
<b>Formulation</b>	The protein was lyophilized from a 0.2 $\mu$ m filtered solution containing 1 × PBS, pH 7.4.
<b>Reconstitution</b>	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 $\mu$ g/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

### Background

Interleukin 1 alpha (IL-1 $\alpha$ ) also known as hematopoietin 1 is a cytokine of the interleukin 1 family that in humans is encoded by the IL1A gene. IL-1 $\alpha$  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.