

IL-18/IGIF/IL-1g/IL1F4, Human, Recombinant

Cat. No. : PCK179

General Information

Synonyms	IGIF;IL-1g;IL1F4
Species	Human
Expression host	E.coli
Sequence	MYFGKLESKLSVIRNLNDQVLFIDQGNRPLFEDMTDSDCRDNAPRTIFIISMYKDSQPRGMAV TISVKCEKISTLSCENKIISFKEMNPPDNIKDTKSDIIFQRSVPGHDNKMQFESSYEGYFLACE KERDLFKLILKKEDELGDRSIMFTVQNEQ with polyhistidine tag at the C-terminus.
Accession	Q14116.1
Tag	His-tag at the C-terminus
Mol mass	18.2 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce IFN gamma secretion in KG-1 cells. The ED50 for this effect is < 5 ng/mL.

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-18 (L-18) is a cytokine that belongs to the IL-1 superfamily and is produced by macrophages and other cells. IL-18 works by binding to the interleukin-18 receptor, and together with IL-12 it induces cell-mediated immunity following infection with microbial products like lipopolysaccharide (LPS). After stimulation with IL-18, natural killer (NK) cells and certain T cells release another important cytokine called interferon-γ (IFN-γ) or type II interferon that plays an important role in activating the macrophages or other cells. The combination of this cytokine and IL12 has been shown to inhibit IL-4 dependent IgE and IgG1 production, and enhance IgG2a production in B cells. IL-18 binding protein (IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity.