IL-36β/IL-36b/IL-1F8, Mouse, Recombinant

Cat. No. : PCK261

General Information

Synonyms	Il36b;Interleukin-36 beta;Interleukin-1 family member 8;IL-1F8;Fil1e;Il1f8
Species	Mouse
Expression host	E.coli
Sequence	Ser31-Lys183
Accession	Q9D6Z6
Mol mass	17.6 kDa
Expiration date	12 months

Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 150 mM Nacl, 1 mM EDTA, pH 8.0.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Background

Mouse Interleukin 36 beta (IL-36B)is a member of the IL-1 family of Proteins. It is a Cytokine that binds to and signals through the IL1RL2/IL-36R Receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells linked to a pro-inflammatory response. IL-36B is synthesized in several cells including resting and activated monocytes, and B cells. The Receptor for IL-36 beta is thought to be a combination of IL-1 Rrp2 and IL-1 RAcP. Interleukin 36 beta is one part of the IL-36 signaling system that is thought to be present in epithelial barriers and to take part in local inflammatory response; similar to the IL-1 system with which it shares the coReceptor IL1RAP. Interleukin 36 beta are involved in a number of fundamental biological processes such as stimulating production of Interleukin-6 and Interleukin-8 in synovial fibrobasts, articular chondrocytes and mature adipocytes, inducing expression of a number of antimicrobial peptides including beta-defensin 4 and beta-defensin 103 as well as a number of matrix metalloproteases, inducing the production of proinflammatory Cytokines in bone marrow-Derived dendritic cells (BMDCs), including IL-12, Il-1 beta, IL-6, TNF-alpha and IL-23, and activating p38 MAPK phosphorylation in BMDCs.Moreover, Interleukin 36 beta may be involved in skin inflammatory response by acting on keratinocytes, dendritic cells, and indirectly on T cells to drive tissue infiltration, cell maturation and cell proliferation. It plays an important role in dendritic cell maturation by stimulating the surface expression of CD80, CD86 and MHC class II and inducing the production of IFN-gamma, I L-4 and IL-17 by T helper 1 (Th1) cells, cultured CD4+ T cells and splenocytes.