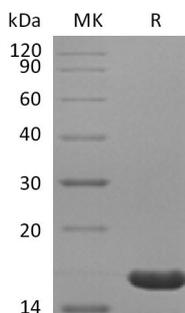


Summary

Name	IL-36 beta/IL-36b/IL-1F8 (153AA)
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/μg as determined by LAL test.
Construction	Recombinant Human Interleukin-36 Beta/IL36B is produced by our E.coli expression system and the target gene encoding Arg5-Glu157 is expressed.
Accession #	Q9NZH7-2
Host	E.coli
Species	Human
Predicted Molecular Mass	17.2 KDa
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM Histidine, 6% Trehalose, 4% Mannitol, 0.05% Tween80, pH5.5.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image



Background

Product Name: Recombinant Human IL-36 Beta (153AA)
Catalog #: PEH2102



Alternative Names

Il36b; Interleukin-36 beta; Interleukin-1 family member 8; IL-1F8; Fil1e; Il1f8

Background

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 fibroblasts, 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, IL-4 and IL-17 by T helper 1 (Th1) cells, cultured CD4+ T cells and splenocytes.

Note

For Research Use Only , Not for Diagnostic Use.