

Recombinant Murine Interleukin-36 beta, 153a.a.

#R00236

Size: 10 µg/100 µg/500 µg

Stability & Storage

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
 - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
 - 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Interleukin-36 is a pro-inflammatory cytokine which plays an important role in the pathophysiology of several diseases. IL-36α, IL-36β, and IL-36γ (formerly IL-1F6, IL-1F8, and IL-1F9) are IL-1 family members that signal through the IL-1 receptor family members IL-1Rrp2 (IL-1RL2) and IL-1RAcP. IL-36 beta is reported to be expressed at higher levels in psoriatic plaques than in symptomless psoriatic skin or healthy control skin and it can stimulate production of interleukin-6 and interleukin-8 in synovial fibroblasts, articular chondrocytes and mature adipocytes. IL-36 beta has two isoforms. IL-36β2 contains one potential N-linked glycosylation site in its C-terminus, while IL-36β isoform 1 lacks potential N-linked glycosylation sites and four of the conserved β-strands. Within the IL-1 family, IL-36β/IL-1F8 shares 30 %, 32 %, 37 %, 46 %, 34 %, 45 % and 28 % a.a. sequence identity with IL-1 ra, IL-1β, IL-36Ra/IL-1F5, IL-36α/IL-1F6,

IL-37/IL-1F7, IL-36γ/IL-1F9 and IL-1F10, respectively.

AA Sequence

SSQSPRNYRVHDSQQMVVLTGNTLTAVPASNNVKP
VILSLIACRDTEFQDVKKGNLVFLGIKRNRLCFCCVEM
EGKPTLQLKEVDIMNLYKERKAQKAFLFYHGIEGSTS
VFQSVLYPGWFIATSSIERQTIILTHQRGKLVNTNFYIE
SEK

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	FIL1 eta, IL-1 eta, IL-1F8, IL-1H2
Accession	Q9D6Z6
GeneID	69677
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 17.4 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by inducing IL-6 secretion in murine NIH/3T3 cells is less than 10 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁵ IU/mg.

Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4, 5% trehalose.
Endotoxin	Less than 1 EU/μg of rMuLL-36β, 153a.a. as determined by LAL method.