

Recombinant Human Interleukin-36 beta, 157a.a.

#R00068

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 (IL-36) is a pro-inflammatory cytokine which plays an important role in the pathophysiology of several diseases. IL-36 α , IL-36 β , and IL-36 γ (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. Furthermore, it can stimulate production of interleukin-6 and interleukin-8 in synovial fibroblasts, articular chondrocytes and mature adipocytes. Two alternatively spliced transcript variants encode distinct (164 or 157 residues) protein isoforms that differ in their C-terminal 70 amino acid residues have been reported and IL-36 β isoform 2 is synthesized as a 157 a.a. protein. Specifically, human IL-36 β shares low sequence identity with IL-1 β , IL-36RA, IL-36 α and IL-36 γ .

AA Sequence

MNPQREAAPKSYAIRDSRQMVVLSGNSLIAAPLSR
SIKPVTLHLIACRDTEFSDKEKGNMVYLGKGDLCFL
CAEIQGGKPTLQLKEKNIMDLVEKKAQKPFLFFHNKE
GSTSVFQSVSYPGWFIATSTTSGQPIFLTKERGITNNT
NFYLDSE

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 $\leq$ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	FIL1 eta, IL-1 eta, IL-1F8, IL-1H2
Accession	Q9NZH7-2
GeneID	27177
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 17.7kDa, a single non-glycosylated polypeptide chain containing 157 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The specific activity is determined by its binding ability in a functional ELISA. Immobilized rHuIL-36 β at 1 µg/mL can bind recombinant human IL-1 Rrp2 Fc Chimera

	with a range of 0.15-5 µg/mL.
Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/µg of rHuIL-36β, 157a.a. as determined by LAL method.