

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

#R00069

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 and it can stimulate production of interleukin-6 and interleukin-8 in synovial fibroblasts, articular chondrocytes and mature adipocytes. It has two isoforms. IL-36 β isoform 2 contains one potential N-linked glycosylation site in its C-terminus, while IL-36 β isoform 1 lacks potential N-linked glycosylation sites and four of the conserved β -strands. Human IL-36 β isoform 2 shares 62 %, 67 %, 63 % and 59 % a.a. identity with the most similar isoform of mouse, canine, bovine and equine IL-36 β , respectively.

AA Sequence

REAAPKSYAIRDSRQMWWVLSGNSLIAAPLSRSIKPV
TLHLIACRDTEFSDKEKGNMVYLGIGKDKLCLFCAEIQ
GKPTLQLKEKNIMDLVEKKAQKPFLFFHNKEGSTSV
FQSVSYPGWFIATSTTSGQPIFLTKERGITNNTNFYLD
SVE

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 17.2 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-8 secretion in human preadipocytes 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 2 × PBS, pH 7.4.
Endotoxin	Less than 1 EU/μg of rHuIL-36β, 153a.a. as determined by LAL method.