## **PrimeGene** Recombinant Human Interleukin-36 beta, 157a.a. a biotechne brand (rHuIL-36β, 157a.a.)

## **PrimeGene Technical Data Sheet**

Catalog Number:	101-36C
Source:	Escherichia coli.
Molecular Weight:	Approximately 17.7kDa, a single non-glycosylated polypeptide chain containing 157 amino acids.
Quantity:	2µg/10µg/1000µg
AA Sequence:	MNPQREAAPK SYAIRDSRQM VWVLSGNSLI AAPLSRSIKP VTLHLIACRD TEFSDKEKGN
	MVYLGIKGKD LCLFCAEIQG KPTLQLKEKN IMDLYVEKKA QKPFLFFHNK EGSTSVFQSV
	SYPGWFIATS TTSGQPIFLT KERGITNNTN FYLDSVE
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The specific activity is determined by its
	binding ability in a functional ELISA. Immobilized rHuIL-36 $\beta$ at 1 µg/mL can bind recombinant
	human IL-1 Rrp2 Fc Chimera with a range of 0.15-5 µg/mL.
Physical Appearance:	Sterile Filtered White lyophilized (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-36 $\beta$ , 157a.a. as determined by LAL method.
<b>Reconstitution:</b>	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.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
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.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further
	evaluation purposes. NOT FOR HUMAN USE.

## Human Interleukin-36 beta

Interleukin-36 (IL-36) is a pro-inflammatory cytokine which plays an important role in the pathophysiology of several diseases. IL-36 $\alpha$ , IL-36 $\beta$ , and IL-36 $\gamma$  (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 $\beta$  isoform 2 is synthesized as a 157 a.a. protein. Specifically, human IL-36 $\beta$  shares low sequence identity with IL-1 $\beta$ , IL-36RA, IL-36 $\alpha$  and IL-36 $\gamma$ .

Website: www.primegene.com Fax: +86 21 61077348