

## **ChemWhat Technical Data Sheet (TDS)**

Catalog Number:

121-36C

Source:

Escherichia coli.

Molecular Weight:

Approximately 20.9 kDa, a single non-glycosylated polypeptide chain containing 183 amino acids.

Quantity:

2μg/10μg/1000μg

AA Sequence:

MMAFPPQSCV HVLPPKSIQM WEPNHNTMHG SSQSPRNYRV HDSQQMVWVL TGNTLTAVPA SNNVKPVILS LIACRDTEFQ DVKKGNLVFL GIKNRNLCFC

CVEMEGKPTL QLKEVDIMNL YKERKAQKAF LFYHGIEGST SVFQSVLYPG

WFIATSSIER QTIILTHQRG KLVNTNFYIE SEK

**Purity:** 

> 95 % by SDS-PAGE and HPLC analyses.

**Biological Activity:** 

Fully biologically active when compared to standard. The specific activity determined by its ability in a functional ELISA. Immobilized rMuIL-36 $\beta$  at 1  $\mu$ g/mL can bind recombinant murine IL-1 Rrp2

with a range of  $0.15-5 \mu g/mL$ .

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris, 300 mM NaCl, pH 8.0, 5 %

trehalose.

**Endotoxin:** 

Less than 1 EU/μg of rMuIL-36β, 183a.a. as determined by LAL method.

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.

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:

ChemWhat Limited in UK offers this branded product for research, development or further

evaluation purposes. NOT FOR HUMAN USE.

## Murine 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 and it can stimulate production of interleukin-6 and interleukin-8 in synovial fibrobasts, articular chondrocytes and mature adipocytes. It beta has two isoforms. IL-36 $\beta$  isoform 2 contains one potential N-linked glycosylation site in its C-terminus, while IL -36 $\beta$  isoform 1 lacks potential N-linked glycosylation sites and four of the conserved  $\beta$ -strands. Within the IL-1 family, IL-36 $\beta$ /IL-1F8 shares 32 %, 37 %, 46 %, 34 %, 45 % and 28 % a.a. sequence identity with IL-1 $\beta$ , IL-36Ra/IL-1F5, IL-36 $\alpha$ /IL-1F6, IL-37/IL-1F7, IL-36 $\gamma$ /IL-1F9 and IL-1F10, respectively.

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