



## Interleukin-36 alpha, 153 amino acids, mouse recombinant (rmlL-36alpha)

**Catalog No:** 97601  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** Interleukin 36 alpha, FIL1E, IL1F6, FIL1, IL1(EPSILON), interleukin 1 family member 6 (epsilon), MGC129552, MGC129553

### Background

Murine IL-36a belongs to the IL-1 family that includes IL-1b, IL-1a, IL-1ra, IL-18, IL-36ra (IL1F5), IL-36b (IL1F8), IL-36g (IL1F9), IL-37 (IL1F7) and IL-38 (IL-1F10). The IL-1 family members display a 12 b-strand, b-trefoil configuration, and are thought to have ascended from a mutual ancestral gene. Murine IL-36a is a 160 amino acid intracellular and secreted protein which holds no signal sequence, no prosegment and no potential N-linked glycosylation sites. IL-36a is released as a reaction to LPS and the cell ATP-induced activation of the P2X7 receptor. Mouse to human, full length IL-36a/IL-1F6 shares 54% aa sequence homology. IL-36a is mostly found in skin and lymphoid tissues, but also in fetal brain, trachea, stomach and intestine.

### Description

Interleukin-36A (153 amino acids) mouse recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 153 amino acids (8-160) and having a molecular mass of 17.0 kDa. IL36A 153 aa mouse is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation

Lyophilized from a 0.2 µm filtered concentrated solution in 1xPBS, pH 7.4 and 5% trehalose.

### Solubility

It is recommended to reconstitute the lyophilized IL-36A 153 a.a. in sterile 18 MΩ-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized IL-36A (153 aa), although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL36A 153 a.a. should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

### Purity

Greater than 95.0% as determined by SDS-PAGE and HPLC analyses.

### Amino Acid Sequence

RAASPSLRHV QDLSSRVWIL QNNILTAVPR KEQTVPVTTT LLPCQYLDL ETNRGDPTYM GVQRPMSCLF CTKDGEQPVL  
QLGEGNIMEM YNKKEPVKAS LFYHKKSGTT STFESAAPFG WFIIVCSKGS CPLILTQELG EIFITDFEMI VVH

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### **Activity**

Fully biologically active when compared to standard. The ED50 as measured by its ability to induce IL-6 secretion in NIH-3T3 mouse embryonic fibroblast cells is less than 20 ng/ml, corresponding to a specific activity of 50,000 IU/mg.

### **Usage**

**This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.**