

## Recombinant Mouse, IL36 $\alpha$ / Interleukin-36 alpha,

### Animal Free & Carrier Free

Cat #: C-CYP187

Size: 5 $\mu$ g, 20 $\mu$ g, 100 $\mu$ g, 500 $\mu$ g, 1mg

Shipping: Blue Ice

### Product Overview

Interleukin-36 $\alpha$  (IL-36 alpha ) binds to and signals through the IL1RL2/IL-36R receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells linked to a pro-inflammatory response. Part of the IL-36 signaling system that is thought to be present in epithelial barriers and to take part in local inflammatory response; similar to the IL-1 system with which it shares the coreceptor IL1RAP. In cultured monocytes upregulates expression of IL-1A, IL -1B and IL-6. In myeloid dendritic cells involved in cell maturation by upregulating surface expression of CD83, CD86 and HLA-DR . In monocyte-derived dendritic cells facilitates dendritic cell maturation and drives T-cell proliferation. IL-36 may also play a role in proinflammatory effects in the lung.

### Product Information

**Source:** *Escherichia Coli*.

**Purity:** >98% as determined by SDS-PAGE. Ni-NTA chromatography.

**Biological Activity:** Measure by its ability to induce IL-6 secretion in 3T3 cells. The ED<sub>50</sub> for this effect is < 15 ng/mL.

The specific activity of recombinant mouse IL-36 alpha is > 1 x 10<sup>5</sup> IU/mg.

**Endotoxin:** <0.1 EU per 1  $\mu$ g of the protein by the LAL method.

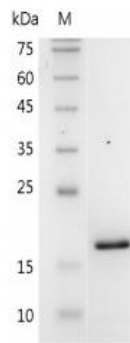
**Amino acid sequence:**

MNKEKELRAASPSLRHVQDLSSRVWILQNNILTAVPRKEQTPVPTITLLPCQYLDLTLETNRGDPTYMGVQRPMSCLFCTKDGEQPVQLQGE

GNIMEMYNKKEPVKASLFYHKKSGTTSTFESAAPGWFIAVCSKGCPLILTQELGEIFITDFEMIVVH with polyhistidine tag at the

C-terminus.

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 7.4.



SDS-PAGE analysis of recombinant mouse IL-36 alpha

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.