

PRODUCT INFORMATION

IL-36 alpha (Interleukin-36 alpha), Mouse

Catalog number	C02037-5UG / C02037-20UG / C02037-100UG
Package	5 µg / 20 µg / 100 µg
Description	<p>Interleukin-36α (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. IL-36 seems to be involved in skin inflammatory response by acting on keratinocytes, dendritic cells and indirectly on T-cells to drive tissue infiltration, cell maturation and cell proliferation. In cultured keratinocytes induces the expression of macrophage, T-cell, and neutrophil chemokines, such as CCL3, CCL4, CCL5, CCL2, CCL17, CCL22, CL20, CCL5, CCL2, CCL17, CCL22, CXCL8, CCL20 and CXCL1, and the production of proinflammatory cytokines such as TNF-alpha, IL-8 and IL-6. 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.</p>
Source	<i>Escherichia coli</i>
Sequence	<p>MNKEKELRAASPSLRHVQDLSSRVWILQNNILTAVPRKEQTVPVTTITLLPCQYLD TLETNRGDPTYMGVQRPMSCLFCTKDGEQPVQLQLGEGNIMEMYNKKEPVKAS LFYHKKSGTTSTFESAAPGWFIAVCSKGCPLILTQELGEIFITDFEMIVVH with polyhistidine tag at the C-terminus</p>
Endotoxin level	<0.1 EU per 1 µg of the protein by the LAL method.
Activity	Measure by its ability to induce IL-6 secretion in 3T3 cells. The ED50 for this effect is <15 ng/mL. The specific activity of recombinant mouse IL-36 alpha is > 1 x 10 ⁵ IU/mg.
Purity	>98% as determined by SDS-PAGE. Ni-NTA chromatography
Formulation	The protein was lyophilized from a solution containing 1X PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H ₂ O to a concentration not less than 100 µg/mL and incubate the stock solution for at least

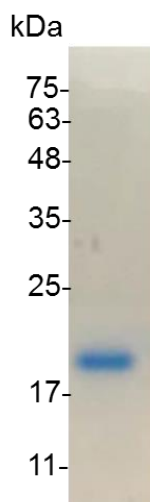
20 min to ensure sufficient re-dissolved.

Storage

Lyophilized protein should be stored at -20°C. Upon reconstitution, protein aliquots should be stored at -20°C or -80°C.

Note

Please use within one month after protein reconstitution.



SDS-PAGE analysis of recombinant mouse IL-36 alpha

For Research Use Only.