

## Recombinant Mouse IL1F6/IL36A Protein

**Catalog No.** PKSM041092

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

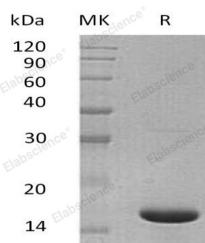
### Description

<b>Synonyms</b>	Interleukin-36 alpha;IL36a;FIL1 epsilon;Interleukin-1 epsilon;IL-1 epsilon;nterleukin-1 family member 6;IL-1F6;Interleukin-1 homolog 1;IL-1H1;Fil1e;Il1e;Il1f6;Il1h1
<b>Species</b>	Mouse
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Arg8-His160
<b>Accession</b>	Q9JLA2
<b>Calculated Molecular Weight</b>	17.3 kDa
<b>Observed molecular weight</b>	16 kDa
<b>Tag</b>	None
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

Interleukin-36 alpha(IL-36a) is a member of the IL-1 family. IL36a is a cytokine that 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. It is a 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. It 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. It Induces the production of proinflammatory cytokines, including IL-12, IL-1 beta, IL-6, TNF-alpha and IL-23 in bone marrow-derived dendritic cells (BMDCs). Moreover, it is involved in dendritic cell maturation by stimulating the surface expression of CD80, CD86 and MHC class II and can induce the production of IFN-gamma, IL-4 and IL-17 by cultured CD4+ T cells and splenocytes. IL36a may play a role in proinflammatory effects in the lung: induces the expression of CXCL1 and CXCL2 in the lung, and the expression of TNF-alpha, IL-36c, IL-1A, IL-1B, CXCL1 and CXCL2 in isolated splenic CD11c+ alveolar macrophages. It may be involved in T cell maturation by stimulating the surface expression of CD40 and modestly CD80 and CD86 in splenic CD11c+ cells and CD4+ T cell proliferation.