

Recombinant Mouse IL1F6/IL36A Protein

Catalog Number: PKSM041092

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

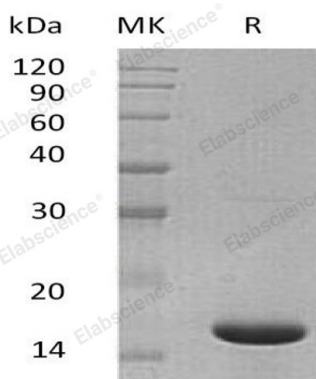
Description

Species	Mouse
Source	E.coli-derived Mouse IL1F6/IL36A protein Arg8-His 160
Calculated MW	17.3 kDa
Observed MW	16 kDa
Accession	Q9JLA2
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

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.