Recombinant Human Interleukin-36 alpha/IL-36 alpha

Catalog Number: PKSH033873

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

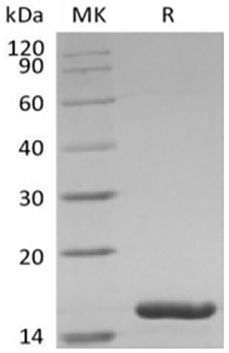
Description

Species	Human
Source	E.coli-derived Human IL-36A;IL-36 alpha protein Lys6-Phe158, with an C-terminal His
Calculated MW	18.1 kDa
Observed MW	17 kDa
Accession	Q9UHA7
Bio-activity	Measure by its ability to induce IL-8 secretion in human PBMCs.The ED_{50} for this effect is <0.7 ng/mL.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 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 sterile 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



> 98 % as determined by reducing SDS-PAGE.

Background

Human Interleukin-36α (IL-36α) is a secreted cytokine that belongs to the Interleukin 1 cytokine family. IL-36α is expressed in the immune system and the fetal brain, but not in other tissues or multiple hematopoietic cell lines. IL-36α is the only IL-1 family member found to be expressed on T-cells. IL-36α and IL-1F8 are involved in the regulation of adipose tissue gene expression. Importantly, IL-36α inhibits PPARγ expression, which may lead to a reduction in adipocyte differentiation suggesting metabolic effects of this cytokine. IL-36α, along with IL-1F8 and IL-1F9, has been shown to act as an agonist by activating the pathway involving NFκB and MAPK in an IL-1Rrp2 dependent manner. This suggest that IL-36α may signal in a similar fashion to IL-1 and IL-18 in having a binding receptor which upon ligation, recruits a second receptor as a signaling component, forming an active heterodimeric receptor complex.

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