

Recombinant human IL36A

Catalog No: #AG0017

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Description

Product Name	Recombinant human IL36A
Host Species	HEK293
Purification	> 95% by Tris-Bis PAGE;> 95% by SEC-HPLC
Immunogen Description	Lys6-Phe158
Target Name	IL36A
Other Names	FIL1 epsilon; FIL1; FIL1(EPSILON); FIL1E; IL-1 epsilon; IL1(EPSILON); IL1E; IL-1E; IL-1F6 (FIL-1-epsilon); IL1F6; IL-1F6; IL36 alpha; IL-36 alpha; IL36A; interleukin 1 family, member 6 (epsilon); interleukin 1, epsilon; Interleukin 36, Alpha; Interleukin-1 epsilon; interleukin-1 family member 6; Interleukin-36 Alpha
Accession No.	Uniprot:Q9UHA7Gene ID:27179
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GeneID	27179
Target Species	human
Calculated MW	17 KDa
Tag Info	additional amino acid free
Formulation	0.22 µm filtered solution of PBS, pH 7.4.
Storage	Aliquot and store at -80°C. Avoid repeated freeze/thaw cycles.

Background

Human IL-36 alpha, previously called IL-1F6 and FIL1 epsilon (family of IL-1 member epsilon), is a member of the IL-1 family which includes IL-1 beta, IL-1 alpha, IL-1ra, IL-18, and novel family members IL-36 Ra (IL-1F5), IL-36 beta (IL-1F8), IL-36 gamma (IL-1F9), IL-37 (IL-1F7) and IL-38 (IL-1F10) (1,2). All family members show a 12 beta strand, beta-trefoil configuration, and are believed to have arisen from a common ancestral gene (1,2). IL-36 alpha is an 182 kDa, 158 amino acid (aa) intracellular and secreted protein that contains no signal sequence, no prosegment and no potential for N-linked glycosylation sites (1,3). It can be released in response to LPS and the cell-ATP-induced activation of the P2X7 receptor (5). A 120 aa isoform missing aa 138 has been reported (6). Human IL-36 alpha (aa 6-158) shares 57-68% aa sequence identity with mouse, rabbit, equine and bovine IL-36 alpha and 27-57% aa sequence identity with other novel IL-1 family members. IL-36 alpha is mainly found in skin and lymphoid tissues, but also in fetal brain, trachea, stomach and intestine (1,3,7). It is expressed by monocytes, B and T cells (1,2). The receptor for IL-36 alpha is a combination of IL-1Rrp2 (also called IL1RL2 or IL1R6), mainly found in epithelia and keratinocytes, and the widely expressed IL-1RAcP (3,7). IL-36 alpha, beta, and gamma all activate NF-kappa B and MAPK pathways in an IL-1Rrp2 dependent manner, and induce production of inflammatory cytokines and chemokines such as CXCL8/IL-8 (7). IL-36 alpha and other family members are overexpressed in psoriatic skin lesions, and transgenic overexpression of IL-36 alpha in skin keratinocytes produces epidermal hyperplasia (7,9). IL-36 alpha is present in kidney tubule epithelia, and it is highly expressed in interstitial lesions in mouse models of chronic glomerulonephritis, lupus nephritis and diabetic nephritis (10).

Note: This product is for in vitro research use only