

Recombinant Human IL-36 beta Protein

Catalog No	RP00020	Category	Protein
Description	Recombinant Human IL-36 beta Protein is produced by <i>E. coli</i> expression system. The target protein is expressed with sequence (Arg5-Glu157) of human IL-36 beta (Accession #NP_775270.1) fused with a 6×His tag at the C-terminus.		

Sequence Information

Species	Human	Gene ID	27177
Tags	6×His tag at the C-terminus	Swiss Prot	Q9NZH7
Synonyms	FIL1;FIL1-(ETA);FIL1H;FILI-(ETA);IL-1F8;IL-1H2;IL1-ETA;IL1F8;IL1H2		
AA Sequence	REAAPKSYAIRDSRQMVVWVLSGNSLIAAPLSRSIKPVTLHLIACRDTEFSDKEKGNMVYL GIKGKDLCLFCAEIQGKPTLQLKEKNIMDLVEKKAQKPFHFFHNKEGSTSVFQSVSYPG WFIATSTTSGQPIFLTKERGITNNTNFYLDSE		

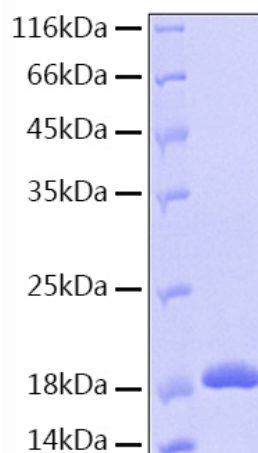
Product information

Source	<i>E. coli</i>
Purity	> 92% by SDS-PAGE.
Endotoxin	< 0.1 EU/μg of the protein by LAL method.
Formulation	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.
Reconstitution	Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.
Storage	Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Background

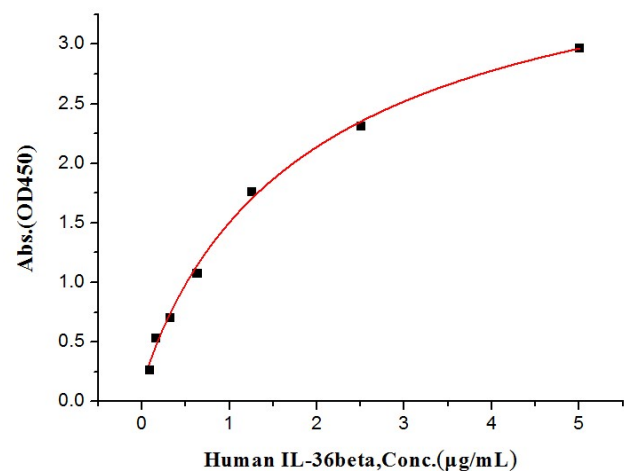
Interleukin-1 family member 8(IL1F8) also known as IL36B, is a member of the interleukin 1(IL-1) cytokine family. IL-36 beta is expressed by keratinocytes, naive CD4+ T cells, neurons, and glia. It is up-regulated in keratinocytes and synovial fibroblasts by inflammatory stimulation and in psoriatic lesions. IL-36 beta promotes inflammatory responses by enhancing the activation and Th1 polarization of dendritic cells and T cells. It also enhances the production of multiple pro-inflammatory cytokines, chemokines, and anti-bacterial defensin peptides by keratinocytes, synovial fibroblasts, and articular chondrocytes. IL-1 family members exert their effects through binding to receptors that belong to the IL-1 receptor (IL-1R) family.

SDS-PAGE



Recombinant Human IL-36 beta was determined by SDS-PAGE under reducing conditions with Coomassie Blue, showing a band at 18 kDa.

Bioactivity



Measured by its binding ability in a functional ELISA. Immobilized recombinant human IL-36 beta at 1 μg/mL (100 μL/well) can bind recombinant human IL-1 Rrp2 Fc Chimera with a linear range of 0.15-5 μg/ml.