

Recombinant Human Interleukin-36 alpha, 158a.a.

#R00066

Size: 10 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Interleukin-36 (IL-36) is a pro-inflammatory cytokine which plays an important role in the pathophysiology of several diseases. IL-36 α , IL-36 β , and IL-36 γ (formerly IL-1F6, IL-1F8, and IL-1F9) are IL-1 family members that signal through the IL-1 receptor family members IL-1Rrp2 (IL-1RL2) and IL-1RAcP. Studies showed IL-36 α is mainly found in skin and lymphoid tissues, but also in fetal brain, trachea, stomach and intestine. Notably, IL-36 alpha is the only novel IL-1 family member expressed on T-cells. Recombinant human interleukin-36 alpha contains 158 amino acids residues which is a single non-glycosylated polypeptide and it is 30 % a.a. identical to IL-1ra, and 27 %, 31 %, 36 %, 46 %, 57% and 28 % a.a. identical to IL-1 β , IL-36Ra/IL-1F5, IL-37/IL-1F7, IL-36 β /IL-1F8, IL-36 γ /IL-1F9 and IL-1F10.

AA Sequence

MEKALKIDTPQQGSIQDINHRVWVLQDQTLIAVPRKD
RMSPVTIALISCRHVETLEKDRGNPIYLGLNGLNLCLM
CAKVGDAQPTLQLKEKDIMDLYNQPEPVKSFLFYHSQ
SGRNSTFESVAFPGWFIAVSSEGCGPLILTQELGKAN
TTDFGLTMLF

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq$ -20°C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	FIL1 epsilon, IL-1 epsilon, IL-1F6, IL-1H1
Accession	Q9UHA7
GeneID	27179
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 17.7 kDa, a single non-glycosylated polypeptide chain containing 158 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The specific activity determined by its ability in a functional ELISA. Immobilized rHuIL-36 α at 1 µg/mL can bind recombinant

	human IL-1 Rrp2 Fc Chimera with a range of 0.15-5 µg/mL.
Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 2 × PBS, pH 7.4.
Endotoxin	Less than 1 EU/µg of rHuIL-36α, 158a.a. as determined by LAL method.