

Recombinant Murine Interleukin-36 alpha, 160a.a.

#R00233

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. IL-36 α is mainly found in skin and lymphoid tissues, but also in fetal brain, trachea, stomach and intestine. It is expressed by monocytes, B and T cells. Notably, IL-36 alpha is the only novel IL-1 family member expressed on T-cells. Recombinant murine interleukin-36 alpha contains 160 amino acids residues which is a single non-glycosylated polypeptide. Specifically, mouse IL-36 α shares 83 % a.a. sequence identity with rat IL-36 α , 54-60 % with human, rabbit, equine and bovine IL-36 α .

AA Sequence

MNKEKELRAASPSLRHVQDLSSRVWILQNNILTAVPR

KEQTVPVTTILLPCQYLDLTLETNRGDPTYMGVQRPM
SCLFCTKDGEQPVVLQLGEGNIMEMYNKKEPVKASLF
YHKKSGTTSTFESAAPGWFIACSKGSCPLILTQEL
GEIFITDFEMIVVH

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	Q9JLA2
GeneID	54448
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 18.0 kDa, a single non-glycosylated polypeptide chain containing 160 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 rMuIL-36 α at 1 µg/mL can bind recombinant

	murine IL-1 Rrp2 with a range of 0.15-5 µg/mL.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, 5 % trehalose.
Endotoxin	Less than 1 EU/µg of rMuL-36α, 160a.a. as determined by LAL method.