

Recombinant Human Interleukin-36 gamma, 169a.a.

#R00070

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 γ is secreted when transfected into 293-T cells and it could constitute part of an independent signaling system analogous to interleukin-1 α (IL-1A), β (IL-1B) receptor agonist and interleukin-1 receptor type I (IL-1R1). Furthermore, IL-36 γ also can function as an agonist of NF-kappa B activation through the orphan IL-1-receptor-related protein 2. Recombinant human IL-36 γ is synthesized as a 19 kDa, 169 amino acid (a.a.) protein that contains no signal sequence, no prosegment and no potential N-linked glycosylation site. Human to mouse, IL-36 γ shares 53 % a.a. identity. Within the family, IL-36 γ shares about 25 % ~ 55 % a.a.

sequence identity with IL-1RA, IL-1 β , IL-36RA, IL-36 α , IL-37, IL-36 β and IL-1F10.

AA Sequence

MRGTPGDADGGGRAVYQSMCKPITGTINDLNQQVW
TLQGQNLVAVPRSDSVTPVTVAVITCKYPEALEQGRG
DPIYLGIQNPEMCLYCEKVGEQPTLQLKEQKIMDLYG
QPEPVKPFIFYRAKTGRTSTLESVAFPDWFIASSKRD
QPIILTSELGKSYNTAFELNIND

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	IL-1RP2, IL-1 epsilon, IL-1F9, IL-1H1
Accession	Q9NZH8
GeneID	56300
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 18.7 kDa, a single non-glycosylated polypeptide chain containing 169 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The specific activity is determined by its binding ability in a functional ELISA. Immobilized rHuIL-36 γ at 1 µg/mL can bind recombinant

	human IL-1 Rrp2 Fc Chimera 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.
Endotoxin	Less than 1 EU/µg of rHuIL-36γ, 169a.a. as determined by LAL method.