

Recombinant Murine Interleukin-36 gamma, 152a.a.

#R00237

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-36α, IL-36β, and IL-36γ (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-36γ is secreted when transfected into 293-T cells and it could constitute part of an independent signaling system analogous to interleukin-1 alpha (IL-1A), beta (IL-1B) receptor agonist and interleukin-1 receptor type I (IL-1R1). Furthermore, IL-36γ also can function as an agonist of NF-kappa B activation through the orphan IL-1-receptor-related protein 2. Recombinant murine IL-36γ is synthesized as a 17.3 kDa, 152 amino acid (a.a.) protein that contains no signal sequence, no prosegment and no potential N-linked glycosylation site. Murine to human, IL-36γ shares 53 % a.a. identity. Within the family, IL-36γ shares about 25 % ~ 55 % a.a.

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

AA Sequence

GRETPDFGEVFDLDQQVWIFRNQALVTVPRSHRVTP
VSVTILPCKYPESLEQDKGIAIYLGIQNPDKCLFCKEV
NGHPTLLLKEEKILDLYHHPEPMKPFLFYHTRTGGTS
TFESVAFPGHYIASSKTGNPIFLTSSKKGEYYNINFNLDI
KS

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 ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Accession	Q8R460
Unigene	Mm.249379.
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 152 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by inducing IL-6 secretion in murine NIH/3T3 cells is less than 10 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁵ IU/mg.
Physical	Sterile Filtered White Lyophilized

Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered solution in 1 M MOPS, 10 mM NaAC, pH7.6, with 2 mM EDTA, 5 % Trehalose, 0.02 % Tween-20.
Endotoxin	Less than 0.1 EU/µg of rMulL-36γ, 152a.a. as determined by LAL method.