Datasheet

Cat. No. P1259

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

Information

Gene ID	56300
Accession #	Q9NZH8
Alternate Names	IL-1RP2, IL-1 epsilon, IL-1F9, IL-1H1
Source	Escherichia coli.
M.Wt	Approximately 18.7 kDa, a single non-glycosylated polypeptide chain containing 169 amino acids.
AA Sequence	MRGTPGDADG GGRAVYQSMC KPITGTINDL NQQVWTLQGQ NLVAVPRSDS VTPVTVAVIT CKYPEALEQG RGDPIYLGIQ NPEMCLYCEK VGEQPTLQLK EQKIMDLYGQ PEPVKPFLFY RAKTGRTSTL ESVAFPDWFI ASSKRDQPII LTSELGKSYN TAFELNIND
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
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
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
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.
Biological Activity	Fully biologically active when compared to standard. The specific activity is determined by its binding ability in a functional ELISA. Immobilized rHuIL-36γ at 1 μg/mL can bind recombinant human IL-1 Rrp2 Fc Chimera with a range of 0.15-5 μg/mL.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	10μg	100μg	500μg
Recombinant Human Interleukin-36 gamma, 169a.a.	10μg	100μg	500μg

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

Quality Control

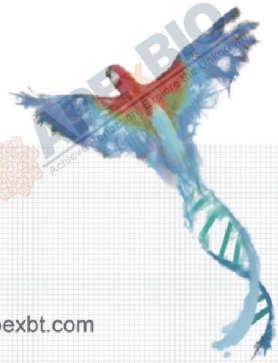
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rHuIL-36γ, 169a.a. as determined by LAL method.

Description

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 alpha (IL-1A), beta (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.

Reference

1. Nicklin MJ, Barton JL, Nguyen M, et al. 2002. Genomics. 79:718-25
2. Dinarello C, Arend W, Sims J, et al. 2010. Nat Immunol. 11:973
3. Debets R, Timans JC, Homey B, et al. 2001. J Immunol. 167:1440-6
4. Busfield SJ, Comrack CA, Yu G, et al. 2000. Genomics. 66:213-6
5. Clark HF, Gurney AL, Abaya E, et al. 2003. Genome Res. 13:2265-70.



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