

Recombinant Murine Interleukin-36 Receptor Antagonist Protein

Information

Gene ID	54450
Accession #	Q9QYY1
Alternate Names	IL-1HY1, IL-1 delta, IL-1F5, IL-1H3, IL-1L1
Source	Escherichia coli.
M.Wt	Approximately 16.9 kDa, a single non-glycosylated polypeptide chain containing 154 amino acids.
AA Sequence	VLSGALCFRM KDSALKVLYL HNNQLLAGGL HAEKVIK GEE ISVVPNRALD ASLSPVILGV QGGSQCLSCG TEKGPIKLE PVNIMELYLG AKESKSFTFY RRDMGLTSSF ESAAYPGWFL CTSPEADQPV RLTQIPEDPA WDAPITDFYF QQCD
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	Measured by its ability to inhibit IL-36γ induced IL-6 production by human PBMCs.
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 Murine Interleukin-36 Receptor Antagonist Protein	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 rMuIL-36RA as determined by LAL method.

Description

Interleukin-36 receptor antagonist (IL-36RA) is a secreted protein which belongs to the interleukin 1 cytokine family (IL-1 family) and it is predominantly expressed in keratinocytes but not in fibroblasts, endothelial cells or melanocytes. IL-36RA has been reported to antagonize the biological activity of IL-36 α (IL-1F6), IL-36 β (IL-1F8), and IL-36 γ (IL-1F9). Furthermore, 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). In addition, The receptor for IL-36RA has not been positively identified. Indirect evidence suggests it is IL-1Rrp2. Recombinant murine interleukin-36 RA contains 154 amino acid residues and it shares 91 % a.a. sequence identity with human IL-36RA.

Reference

1. Born TL, Smith DE, Garka KE, et al. 2000. J Biol Chem. 275:41528
2. Dunn EF, Gay NJ, Bristow AF, et al. 2003. Biochemistry. 42:10938-44
3. Barton JL, Herbst R, Bosisio D, et al. 2000. Eur J Immunol. 30:3299-308
4. Debets R, Timans JC, Homey B, et al. 2001. J Immunol. 167:1440-6
5. Towne JE, Renshaw BR, Douangpanya J, et al. 2011. J Biol Chem. 286:42594-602.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com