HB220425

Recombinant Mouse Interleukin-36 Receptor Antagonist Protein (Mouse IL-36RA)

Product Information

Product Name	Cat#	Size
Recombinant Mouse Interleukin-36 Receptor Antagonist Protein (Mouse IL-36RA)	90163ES10	10 μg
	90163ES60	100 μg
	90163ES76	500 μg

Product Description

Mouse interleukin-36 receptor antagonist (IL-36Ra; previously IL-1F5; also named FIL-1 δ [delta], IL-1HY1, IL-1H3, and IL-1L1) is a member of the IL-1 family of proteins. IL-1 family members include IL-1 beta, IL-1 alpha, IL-1ra, IL-18 and IL-1F5 through F10. All family members show a 12 beta -strand, beta -trefoil configuration, and are believed to have arisen from a common ancestral gene that underwent multiple duplications. The mouse IL-36Ra/IL-1F5 gene maps to a region on mouse chromosome 2 that contains all other IL-1 family members (except IL-18), supporting an evolutionary relationship with the IL-1 family. It is particularly close to the gene for IL-1ra and is likely a relatively recent duplication of that gene. In humans, there is an alternate start site that potentially gives rise to an alternate splice form. This translated product has a premature stop codon, resulting in a truncated 16 aa peptide. Mouse to human, full length IL-36Ra/IL-1F5 has 90% aa identity. Within the family, IL-36Ra/IL-1F5 is 48%, 30%, 35%, 35%, 35%, 37% and 43% aa identical to IL-1ra, IL-1 beta, IL-36 alpha /IL-1F6, IL-37/IL-1F7, IL-36 beta /IL-1F8, IL-36 gamma /IL-1F9 and IL-1F10, respectively. Cells reported to express IL-36Ra/IL-1F5 include monocytes, B cells, dendritic cells/Langerhans cells, keratinocytes, and gastric fundus Parietal and Chief cells. The receptor for IL-36Ra/IL-1F5 has not been positively identified. Indirect evidence suggests it is IL-1 Rrp2 and/or IL-1 RAcP. In either case, activity association with receptor binding is unclear. It was initially reported to be an antagonist of IL-36 gamma activity. This would be consistent with its hypothesized relationship to IL-1RA.

Product Properties

Synonyms	IL-1HY1, IL-1 delta, IL-1F5, IL-1H3, IL-1L1
Accession	Q9QYY1
GeneID	54450
Source	E.coli-derived Mouse IL-36RA, Val3-Asp156.
Molecular Weight	Approximately 16.9 kDa.
AA Sequence	VLSGALCFRM KDSALKVLYL HNNQLLAGGL HAEKVIKGEE ISVVPNRALD ASLSPVILGV QGGSQCLSCG TEKGPILKLE PVNIMELYLG AKESKSFTFY RRDMGLTSSF ESAAYPGWFL CTSPEADQPV RLTQIPEDPA WDAPITDFYF QQCD
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 95% by SDS-PAGE and HPLC analyses.

Biological Activity	Measured by its ability to inhibit IL-36γ induced IL-6 production by human PBMCs.
Endotoxin	< 1.0 EU per 1μg of the protein by the LAL method.
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.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20℃ to -80℃ for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!