Recombinant Mouse IL-1ra/IL-1F3 protein (His Tag)

Catalog Number: PDMM100198

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Mouse
Source	HEK293 Cells-derived Mouse IL-1ra protein Arg27-Gln178, with an C-terminal His
Calculated MW	16.6 kDa
Observed MW	22 kDa
Accession	P25085
Bio-activity	Not validated for activity
Properties	
Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Interleukin-1 receptor antagonist protein (Il1rn), also known as IL-1ra, IRAP or IL1 inhibitor, is a member of the interleukin 1 cytokine family. This protein inhibits the activities of interleukin 1 alpha (IL1A) and interleukin 1 beta (IL1B), and modulates a variety of interleukin 1 related immune and inflammatory responses. The mouse Il1rn gene encodes a 178 amino acids (aa) protein with a 26 aa signal peptide. Mouse Il1rn protein shares 26% and 19% identity with its homologues IL-1 beta and IL-1 alpha, respectively. Il1rn can Inhibits the activity of interleukin-1 by binding to receptor IL1R1 and preventing its association with the coreceptor IL1RAP for signaling, but has no interleukin-1 like activity. Recently, an recombinant human Il1rn protein is used in the treatment of rheumatoid arthritis, an autoimmune disease in which IL-1 plays a key role.