Recombinant Mouse Il1rn protein

Cat. No. Il1rn-546M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Il1rn protein was expressed in Escherichia coli.
Species	Mouse
Source	E.coli
ProteinLength	152
Description	IL-1RA was initially called the IL-1 inhibitor which is encoded by the IL1RN gene and it is a member of the interleukin 1 cytokine family. IL-1RA is secreted by various types of cells including immune cells, epithelial cells, and adipocytes. IL-RA has functions of inhibiting the activity of interleukin-1 by binding to receptor IL1R1 and preventing its association with the coreceptor IL1RAP for signaling. IL-1RA is also used in the treatment of rheumatoid arthritis, an autoimmune disease in which IL-1 plays a key role. The murine IL-1RA is a single non-glycosylated polypeptide chain containing 152 amino acids and it has been shown to block the inflammatory responses induced by IL-1 both in vitro and in vivo. The protein shows 26 % amino acid homology to IL-1β and 19% homology to IL-1α. It also shares 90 % a.a. sequence identity with rat IL-1RA.
Form	Lyophilized from a 0.2μm filtered concentrated solution in PBS, pH 7.4.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by inhibiting IL-1α-dependent proliferation of murine D10S cells is less than 50 ng/ml,

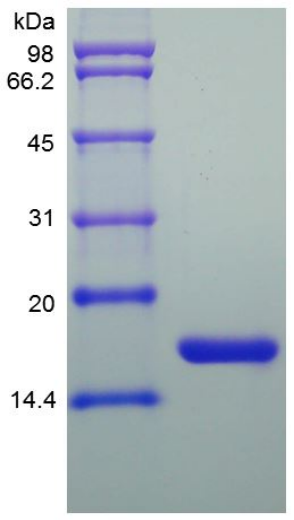
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	corresponding to a specific activity of > 2.0 × 10^4 IU/mg in the presence of 50 pg/ml rHuIL-1α.
Molecular Mass	Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 152 amino acids.
AA Sequence	RPSGKRPCKMQAFRIWDTNQKTFYLRNNQLIAGYLQGPNIKLEEKIDMVPIDLHSVFL GIHGGKLCLSCAKSGDDIKLQLEEVNITDLSKNKEEDKRFTFIRSEKGPTTSFESAAC PGWFLCTTLEADRPVSLTNTPEEPLIVTKFYFQEDQ
Endotoxin	Less than 1 EU/μg of rMuIL-1RA as determined by LAL method.
Purity	>97% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
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 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	Il1rn
Official Symbol	Il1rn

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Synonyms	IL1RN; interleukin 1 receptor antagonist; interleukin-1 receptor antagonist protein; IRAP; IL-1RN; IL1 inhibitor; IL-1ra; F630041P17Rik;
Gene ID	16181
mRNA Refseq	NM_001039701
Protein Refseq	NP_001034790
UniProt ID	Q542W1
SDS-PAGE of Il1rn-546M	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA