

IL1rn

Recombinant Mouse Interleukin-1 Receptor Antagonist

Catalog No.	CS487A CS487B CS487C	Quantity:	20 µg 100 µg 1 mg
Alternate Names:	IL-1ra		
Description:	<p>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. In addition, It inhibits 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 mouse 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 <i>in vitro</i> and <i>in vivo</i>. The protein shows 26% amino acid homology to IL-1beta and 19% homology to IL-1alpha. It also shares 90% a.a. sequence identity with rat IL-1RA.</p> <p>Recombinant Mouse IL-1 Receptor Antagonist is a single non-glycosylated polypeptide chain containing 152 amino acids.</p>		
Gene ID:	16181		
Source:	<i>E. coli</i>		
Molecular Weight:	Approximately 17.3 kDa		
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, + 1 mM beta-mercaptoethanol.		
Purity:	>97% by SDS-PAGE and HPLC analyses.		
Endotoxin Level:	<1 EU/µg as determined by LAL method.		
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ determined by inhibiting IL-1alpha-dependent proliferation of mouse D10S cells is less than 60 ng/ml.		
Specific Activity:	>1.7 × 10 ⁴ IU/mg in the presence of 50 pg/ml rHuIL-1 alpha.		
Amino Acid Sequence:	RPSGKRPCCKM QAFRIWDTNQ KTFYLRNNQL IAGYLQGPNI KLEEKIDMVP IDLHSVFLGI HGGKLCLSCA KSGDDIKLQL EEVNITDLSK NKEEDKRFTF IRSEKGPTTS FESAACPGWF LCTTLEADRP VSLTNTPEEP LIVTKFYFQE DQ		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.		
Storage & Stability:	This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2-4°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. Avoid repeated freeze/thaw cycles.		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

