

Recombinant Human IL-1RA Protein

Product Information

Product Name	Cat#	Size
Recombinant Human IL-1RA Protein	90102ES20	20 µg
	90102ES60	100 µg
	90102ES72	500 µg
	90102ES80	1 mg

Product Description

IL-1ra was originally isolated from the urine of patients with monocytic leukemia and has also been purified from adherent monocytes. The naturally occurring, fully glycosylated form has an apparent molecular weight of about 25,000 Daltons. The protein shows 26% amino acid homology to IL-1 beta and 19% homology to IL-1 alpha. It will compete with either factor for receptor binding, but does not interact with either one. Human IL-1ra will bind to both types of IL-1 receptor (I and II) on human cells, but reportedly will not block binding to the type II receptor on murine pre-B cell lines. The recombinant, non-glycosylated form of IL-1ra blocks binding of IL-1 to its receptor equally as well as the naturally-occurring, glycosylated form. The IL-1ra has been shown to block the inflammatory responses induced by IL-1 both in vitro and in vivo. Currently, pre-clinical and clinical studies are underway to test possible therapeutic applications for IL-1ra in the treatment of sepsis, rheumatoid arthritis and chronic myelogenous leukemia.

Product Properties

Synonyms	IL-1RN, IRAP
Accession	P18510
GeneID	3557
Source	E.coli-derived Human IL-1RA, Arg26-Glu177.
Molecular Weight	Approximately 26.2 kDa.
AA Sequence	RPSGRKSSKM QAFRIWDVNQ KTFYLRNNQL VAGYLQGPV NLEEKIDVVP IEPHALFLGI HGGKMCLSCV KSGDETRLQL EAVNITDLSE NRKQDKRFAF IRSDSGPTTS FESAACPGWF LCTAMEADQP VSLTNMPDEG VMVTKFYFQE DE
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 96% by SDS-PAGE and HPLC analyses. The ED ₅₀ as determined by inhibiting IL-1α-dependent proliferation of murine D10S cells is less than 40 ng/mL, corresponding to a specific activity of > 2.5 × 10 ⁴ IU/mg in the presence of 50 pg/ml rHuIL-1α.
Biological Activity	Fully biologically active when compared to standard.
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. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	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°C to -80°C 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!