

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Human Interleukin-1 receptor antagonist (rHu IL-1ra)

Catalog Number: PR1051

Source: Escherichia coli

Quantity: 20µg/100µg/1.0mg

Description

Interleukin-1 receptor antagonist (IL-1ra) is a member of the IL-1 family. Endogenous IL-1ra is produced in numerous animal disease models as well as in human autoimmune and chronic inflammatory diseases. It binds to IL-1 receptors in competition with IL-1, but does not elicit intracellular response from this binding. Its role in counteracting the proinflammatory effects of IL-1 is being studied by numerous research groups. IL-4 and IL-13 have been shown to amplify the stimulatory effect of IL-1-beta on the production of soluble and intracellular forms of IL-1ra. The regulated expression of IL-1ra in various cell types has been shown to be influenced by cytokines. In synovial fibroblasts the synthesis of IL-1ra is markedly enhanced by IL-1, TNF-alpha, or PDGF.

Molecular Weight:

Approximately 17.0 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.

Purity:

>95% by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The ED50 as determined by the dose-dependent inhibition of IL-1 stimulation of D10S cells was found to be 0.5 ng/ml, corresponding to a Specific Activity of 2.0×10^6 IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.

AA Sequence:

M R P S G R K S S K M Q A F R I W D V N Q K T F Y L
R N N Q L V A G Y L Q G P N V N L E E K I D V V P I E
P H A L F L G I H G G K M C L S C V K S G D E T R L Q
L E A V N I T D L S E N R K Q D K R F A F I R S D S G P
T T S F E S A A C P G W F L C T A M E A D Q P V S L T
N M P D E G V M V T K F Y F Q E D E

Endotoxin:

Less than 1EU/µg of rHuIL-1ra as determined by LAL method.

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 $<-20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Storage:

This lyophilized preparation is stable at $2-8^{\circ}\text{C}$, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at $2-8^{\circ}\text{C}$. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C . Avoid repeated freeze/thaw cycles.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

Bioworld Technology, Inc.

1660 South Highway 100, Suite 500 St. Louis Park, MN

55416, USA.

Tel: 6123263284

Email: info@bioworld.com

Fax: 6122933841

MADE IN CHINA

Bioworld technology, co, Ltd.

No 9, weidi road Qixia District Nanjing, 210046, P, R.China.

Tel: 0086-025-86371664

Email: info@biogot.com

Fax: 0086-025-86213570