

## 32-8190: Recombinant Rat Interleukin-1 Alpha/ IL-1a

**Gene :** Il1a  
**Gene ID :** 24493  
**Uniprot ID :** P16598

### Description

Source: E.coli.  
MW :17.9kD.

Recombinant Rat Interleukin-1 Alpha is produced by our E.coli expression system and the target gene encoding Ser115-Ser270 is expressed. Interleukin 1 (IL-1) is a name that designates two proteins, IL-1a and IL-1 beta, which are the products of distinct genes, but which show approximately 25% amino acid (aa) sequence identity and which recognize the same cell surface receptors. IL-1a and IL-1 beta are both synthesized as 31 kDa precursors that are subsequently cleaved into proteins with molecular weights of approximately 17,000 Da. Neither precursor contains a typical hydrophobic signal peptide sequence and most of the precursor form of IL-1a remains in the cytosol of cells, although there is evidence for a membrane-bound form of the precursor form of IL-1a. Although IL-1 production is generally considered to be a consequence of inflammation, evidence suggests that IL-1 is also temporally upregulated during bone formation and the menstrual cycle and can be induced in response to nervous system stimulation. In response to classic stimuli produced by inflammatory agents, infections or microbial endotoxins, a dramatic increase in the production of IL-1 by macrophages and various other cells is seen.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** MSAPHSFQNNLRYKLIRIVKQEFIMNDSL NQNIYVDM DRIHLKAASLNDLQLEV KFD MYAYSSGGDD  
SKYPVTLKVSNTQLFVSAQGEDKPVLLKEIPETPKLITGSETDLIFFWEKINSKNYFTSAAFPELLIATK  
EQSQVHLARGLP SMIDFQIS

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.