

Recombinant Rat IL-1α

Catalog No: CF75

Description Recombinant Rat Interleukin-1 Alpha is produced by our E. coli expression system and the target gene

encoding Ser115-Ser270 is expressed.

Source E. coli

Alternative name Interleukin-1 alpha; IL-1 alpha; II1a

Accession No. P16598

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

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

Shipping The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage 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 Sequence MSAPHSFQNNLRYKLIRIVKQEFIMNDSLNQNIYVDMDRIHLKAASLNDLQLEVKFDMYAYSSGGDDSK YPVTLKVSNTQLFVSAQGEDKPVLLKEIPETPKLITGSETDLIFFWEKINSKNYFTSAAFPELLIATKEQSQ VHLARGLPSMIDFQIS

Background

Interleukin 1 (IL-1) is a name that designates two proteins, IL-1 α and IL-1 β , 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-1 α and IL-1 β 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-1 α remains in the cytosol of cells, although there is evidence for a membranebound form of the precursor form of IL-1 α . 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.

SDS-Page



