RECOMBINANT MOUSE INTERLEUKIN-1α (mIL-1α)

Catalog # 02747	**5 µg per vial**
Catalog # 02947	**25 µg per vial**

PRODUCT DESCRIPTION:

IL-1 is a name that designates two proteins, IL-1α and IL-1β, that are the products of distinct genes, but recognize the same cell surface receptors. Both proteins are produced by a wide variety of cells in response to stimuli such as those produced by inflammatory agents, infections, or microbial endotoxins. The proteins are synthesized as 31 kDa precursors that are subsequently cleaved into proteins with molecular weights of approximately 17.5 kDa. Mature human and mouse IL-1α share approximately 75% amino acid sequence identity and human IL-1β has been found to be active on mouse cell lines. IL-1α and IL-1β are potent pro-inflammatory cytokines that induce a wide variety of biological activities on different cell types. The 156 amino acid residue recombinant protein has a predicted molecular mass of approximately 18 kDa.

SOURCE:

A DNA sequence encoding the mature mouse IL-1α protein was expressed in *E. coli.*

PURITY:

Greater than 97%, as determined by SDS-PAGE and visualized by silver stain. Endotoxin level less than 0.1 ng per 1µg of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a sterile solution in PBS containing 50 µg of bovine serum albumin per 1µg of cytokine.

RECONSTITUTION:

It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 1 µg/mL of the cytokine.

STABILITY/STORAGE:

Lyophilized samples are stable for greater than six months at -20°C to -70°C.
Reconstituted mouse IL-1α can be stored under sterile conditions at 2°C to 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

Avoid repeated freeze-thaw cycles.

ACTIVITY:

Activity was determined in a cell proliferation assay using the mouse helper T cell line, D10.G4.1 and the ED_{50} for this effect was typically 3 - 7 pg/mL.

THIS REAGENT IS FOR RESEARCH USE ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.

STEMCELL TECHNOLOGIES INC
777 West Broadway, Suite 808
Vancouver, British Columbia
CANADA V5Z 4J7
Tel: (604) 877-0713 Toll-free Tel: 1-800-667-0322
Fax: (604) 877-0704 Toll-free Fax: 1-800-567-2899
Website: www.stemcell.com E-mail: info@stemcell.com

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