

Recombinant Humn LIF (BL-43109)

Product information

Product name	Recombinant Humn LIF (BL-43109)
Catalog Number	BL-43109
Source	E.coli
Synonyms	Leukemia Inhibitory Factor, Differentiation-stimulating factor, D factor, Melanoma-derived LPL inhibitor (MLPLI)
AA Sequence	SPLPITPVNA TCAIRHPCHN NLMNQIRSQL AQLNGSANAL FILYYTAQGE PFPNNLDKLC GPNVTDFPPE HANGTEKAKL VELYRIVVYL GTSLGNITRD QKILNPSALS LHSKLNATAD ILRGLLSNVL CRLCSKYHVG HVDVTYGPDT SGKDVQKKK LGCQLLGKYK QIIAVLAQAF
Purity	≥ 98% by SDS-PAGE gel and HPLC analyses
Biological Activity	Determined by its ability to stimulate the proliferation of human TF-1 cells. The expected ED50 is ≤ 0.1 ng/ml, corresponding to a specific activity of ≥ 1 x 10 ⁷ units/mg.
Cross Reactivity	Mouse
Conjugate	N/A

Background

LIF is a pleiotrophic factor produced by multiple cell types, including T cells, myelomonocytic lineages, fibroblasts, liver, heart and melanoma. LIF promotes long-term maintenance of embryonic stem cells by suppressing spontaneous differentiation. Other activities include the stimulation of acute phase protein synthesis by hepatocytes, stimulation of differentiation of cholinergic nerves, and suppression of adipogenesis by inhibiting the lipoprotein lipase in adipocytes. While human LIF is active on mouse cells and is widely used in the maintenance of murine ESC to prevent spontaneous differentiation, mouse LIF is not active on human cells due to its inability to bind to the human LIF receptor. Recombinant Human LIF is a 19.6 kDa protein containing 180 amino acids residues, including three disulfide bonds.

Manufactured using all Animal-Free reagents.