10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Animal-Free Recombinant Human LIF
Catalog # PBG10539

Specification

Animal-Free Recombinant Human LIF - Product Information

Animal-Free Recombinant Human LIF - Additional Information

Description
LIF is a pleiotrophic factor produced by multiple cell types including T cells, myelomoncytic 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 M cells and is widely used in the maintenance of murine ESC to prevent spontaneous differentiation, M 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.

BiologicalActivity
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 10⁷ units/mg.

Authenticity
Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin
Endotoxin level is <0.1 ng/ µg of protein (<1EU/ µg).

Protein Content
Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage
-20°C

Precautions
Animal-Free Recombinant Human LIF is for research use only and not for use in diagnostic or therapeutic procedures.

Animal-Free Recombinant Human LIF - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Animal-Free Recombinant Human LIF - Images