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Product Information

Monoclonal Anti-Leukemia Inhibitory Factor Clone 9824

produced in mouse, purified immunoglobulin

Catalog Number L0669

Product Description

Anti-Leukemia inhibitory factor (rhLIF) is developed from a mouse hybridoma elicited from a mouse immunized with purified, *E. coli*-derived, recombinant human leukemia inhibitory factor (GeneID 3976). The IgG fraction of ascites fluid was purified by Protein A affinity chromatography.

Anti-Leukemia inhibitory factor recognizes human leukemia inhibitory factor. Applications include immunoblotting, ELISA, Immunohistochemistry and neutralization of rhLIF.

Leukemia inhibitory factor is a multifunctional glycoprotein that induces macrophage differentiation and suppresses the proliferation of the murine M1 myeloid cell line.¹

Reagent

Supplied lyophilized from a 0.2 μm filtered solution of phosphate buffered saline with 5% trehalose.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

To one vial of lyophilized powder, add 1 mL of 0.2 μm filtered PBS to produce a 0.5 mg/mL stock solution. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Storage/Stability

Prior to reconstitution, store at –20 °C. The reconstituted product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended.

Product Profile

 $\underline{Immunoblotting} \hbox{: a working concentration of 1-2 $\mu g/mL$ is recommended. The detection limit for recombinant human LIF is ~ 50 ng/lane under non-reducing and reducing conditions.}$

<u>ELISA capture</u>: a working concentration of 2-4 μ g/mL at 100 μ L/well is recommended as the coating concentration.

Immunohistochemistry: a working concentration of $25 \mu g/mL$ is recommended for use.

<u>Neutralization</u>: The exact concentration of antibody required to neutralize rhLIF activity is dependent on the cytokine concentration, cell type, growth conditions and the type of activity studied.

The Neutralization Dose_{50} (ND₅₀) for this antibody is defined as that concentration of antibody required to yield one-half maximal inhibition of the cytokine activity on a responsive cell line, when that cytokine is present at a concentration just high enough to elicit a maximum response.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

Endotoxin: < 0.1 EU/mg antibody as determined by the LAL method.

References

- 1. Gearing, D., et al., *EMBO J.*, **6**, 3995 (1987).
- 2. Moreau, F.J., et al., Nature, 336, 690 (1988).

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