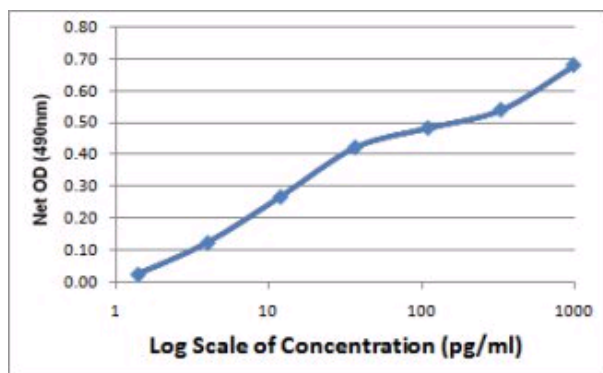


Mouse EGF Recombinant Protein

Catalog Number: 14-8984

Also Known As: epidermal growth factor

RUO: For Research Use Only



Standard curve of Mouse EGF Recombinant Protein.

Product Information

Contents: Mouse EGF Recombinant Protein

REF Catalog Number: 14-8984

Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in a sterile environment

Source: E. coli

Purity: Greater than 97%, as determined by SDS-PAGE

Endotoxin Level: Less than 0.01 ng/ug cytokine as determined by the LAL assay.

Bioactivity: Measured by mouse BALB/c 3T3 cell proliferation assay. The ED₅₀ is typically 20 pg/ml, corresponding to a specific activity of 5X10⁷ units/mg.

Formulation: Sterile liquid; phosphate buffered saline, 1.0% BSA. 0.22 µm filtered.

 Temperature Limitation: Store at less than or equal to -70°C.

LOT Batch Code: Refer to Vial

 Use By: Refer to Vial

Description

Epidermal growth factor (EGF) is the member of the EGF family that shares a structural motif, the EGF-like domain, and are synthesized as type I transmembrane precursor proteins that contain several EGF domains in the extracellular region. The mouse EGF precursor has 1217 amino acid residues containing nine EGF domains. The mature protein consists of 53 aa and is generated by proteolytic excision of the EGF domain proximal to the transmembrane region resulting in a molecular mass of 6 kDa. EGF is produced by many cell types and in blood and various body fluids, including milk, urine, saliva, seminal fluid, pancreatic juice, cerebrospinal fluid, and amniotic fluid. EGF can promote proliferation and differentiation of mesenchymal and epithelial cells. EGF is also a mitogen for fibroblasts, epithelial and endothelial cells, and promotes colony formation of epiderma.

Applications Reported

Recombinant Mouse EGF has been reported for use in cytokine bioassays and ELISA.

Applications Tested

This reagent has been tested by bioassays using the EGF- responsive mouse BALB/c 3T3 cell line. The ED₅₀, as determined by the dose-dependent stimulation of 3T3 cells proliferation, is 20 pg/ml, corresponding to a specific activity of 5X10⁷ units/mg.

References

Tanabe KK, Lemoine A, Finkelstein DM, Kawasaki H, Fujii T, Chung RT, Lauwers GY, Kulu Y, Muzikansky A, Kuruppu D, Lanuti M, Goodwin JM, Azoulay D, Fuchs BC. Epidermal growth factor gene functional polymorphism and the risk of hepatocellular carcinoma in patients with cirrhosis. *JAMA*. 2008 Jan 2;299(1):53-60.

Chan SY, Wong RW. Expression of epidermal growth factor in transgenic mice causes growth retardation. *J Biol Chem*. 2000 Dec 8;275(49):38693-8.

Zabel BU, Eddy RL, Lalley PA, Scott J, Bell GI, Shows TB. Chromosomal locations of the human and mouse genes for precursors of epidermal growth factor and the beta subunit of nerve growth factor. *Proc Natl Acad Sci U S A*. 1985 Jan;82(2):469-73.

Related Products

14-8988 Human EGF Recombinant Protein

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