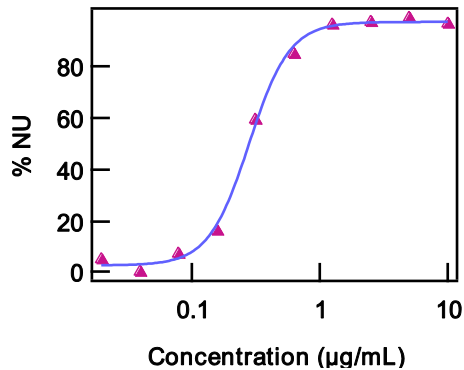


Mouse Noggin Recombinant Protein Carrier-Free

Catalog Number: 34-8004

RUO: For Research Use Only. Not for use in diagnostic procedures.



Inhibition of BMP-2 activity in C3H/10T1/2 cells by Mouse Noggin Recombinant Protein.

Product Information

Contents: Mouse Noggin Recombinant Protein Carrier-Free

REF **Catalog Number:** 34-8004

Concentration: 0.5 mg/mL

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

Source: E. coli expressed amino acids Asp45-Cys232 accession number NM_008711

Molecular Mass: 46.4 kDa

Purity: > 97%, as determined by SDS-PAGE.

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

Bioactivity: The ED₅₀ of this protein, as measured by inhibition of alkaline phosphatase induction by BMP-2 in C3H/10T1/2 cells, is 0.3-0.15 ug/mL in the presence of 500 ng/mL Human BMP-2 Recombinant Protein. This corresponds to a specific activity of 3.3x10⁴ - 6.7x10⁴ Units/mg.

Formulation: Sterile liquid: 20mM Na Phosphate, 0.5M NaCl, 5% glycerol, pH 7.2. 0.22 um filtered.

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

Batch Code: Refer to vial

Use By: Refer to vial



Description

Noggin is one of a group of proteins that act as secreted antagonists of BMP activity. BMPs are essential for osteogenesis and organogenesis during embryonic development, and also play a role in tissue healing in adults. Noggin inhibits BMP activity by binding to them with high affinity, blocking their ability to bind to their receptor. Noggin was first identified in *Xenopus* embryos and described as part of the Spemann organizer. Along with Chordin and Follistatin, it drives neural formation and dorsalization during embryonic development. It was later found to have widespread expression and function, and continues to remain active in the nervous system of adults.

Applications Reported

Mouse Noggin Recombinant Protein Carrier-Free is biologically active.

Applications Tested

The ED₅₀ of this protein, as measured by inhibition of alkaline phosphatase induction by BMP-2 in C3H/10T1/2 cells,

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References

Bonaguidi MA, Peng CY, McGuire T, Falciglia G, Gobeske KT, Czeisler C, Kessler JA. Noggin expands neural stem cells in the adult hippocampus. *J Neurosci.* 2008 Sep 10;28(37):9194-204.

Zhu W, Kim J, Cheng C, Rawlins BA, Boachie-Adjei O, Crystal RG, Hidaka C. Noggin regulation of bone morphogenetic protein (BMP) 2/7 heterodimer activity in vitro. *Bone.* 2006 Jul;39(1):61-71.

Canalis E, Economides AN, Gazzero E. Bone morphogenetic proteins, their antagonists, and the skeleton. *Endocr Rev.* 2003 Apr;24(2):218-35.

Valenzuela DM, Economides AN, Rojas E, Lamb TM, Nunez L, Jones P, Lp NY, Espinoza R 3rd, Brannan CI, Gilbert DJ. Identification of mammalian noggin and its expression in the adult nervous system. *J Neurosci.* 1995 Sep;15(9):6077-84.

Related Products

34-8507 Human BMP-2 Recombinant Protein Carrier-Free

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