Recombinant Human Noggin

Catalog Number PHC1506 (20 µg)

Pub. No. MAN0003548 **Rev.** A.0

Product specifications

Lot number	See product label.
Molecular weight	Non-glycosylated, non-disulfide-linked homodimer consisting of two 206 amino acid polypeptide chains, with a total molecular weight of 46.2 kDa (each subunit having a molecular weight of 23.1 kDa).
Purity	>95% as determined by SDS PAGE analysis.
Biological activity	ED_{50} <3 ng/mL, determined by measuring the dose dependent inhibition of alkaline phosphatase production induced by 5 ng/mL of BMP-4 in ATDC-5 chondrogenic cells. Determine the optimal concentration for each specific application using an initial dose response assay.
Formulation	Lyophilized, carrier free.
Sterility	Filtered before lyophilization through a 0.22 micron sterile filter.
Endotoxin	<0.1 ng/µg
Production	Produced in *E. coli* and purified via sequential chromatography.
Reconstitution recommendation	Centrifuge the vial briefly, before opening to bring the contents to the bottom. Reconstitute the lyophilized protein in 10 mM acetic acid to a concentration of 0.1–1.0 mg/mL. Apportion the reconstituted protein into working aliquots and store at ≤ –20°C. Make any further dilutions of the reconstituted protein in appropriate buffered solution containing a carrier protein, such as 0.1% HSA or BSA.
Suggested working dilutions	The optimal concentration should be determined for each specific application.
Storage	The lyophilized protein is stable at room temperature for 3 weeks. Store at –20°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at 4°C for 2–7 days, or at –20°C. Avoid repeated freeze-thaw cycles.
Expiration date	Expires one year from date of receipt when stored as instructed.
References	Que, J, et al. (2006) Morphogenesis of the trachea and esophagus: current players and new roles for noggin and Bmps. Differentiation 74(7):422-437. Yanagita, M. (2005) BMP antagonists: their roles in development and involvement in pathophysiology. Cytokine Growth Factor Rev. 16(3):309-317. Chen, D, et al. (2004) Bone morphogenetic proteins. Growth Factors 22(4):233-241. Sebald, W, et al. (2004) Molecular recognition in bone morphogenetic protein (BMP)/receptor interaction. Biol. Chem. 385(8):697-710.

Limited product warranty

Explanation of Symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

Manufacturer: Life Technologies Corporation | 5781 Van Allen Way | Carlsbad, CA 92008

The information in this guide is subject to change without notice.