

# Recombinant Human Noggin

**Catalog Number** PHC1506 (20 µg)

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

## Product specifications

<b>Lot number</b>	See product label.
<b>Molecular weight</b>	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).
<b>Purity</b>	>95% as determined by SDS PAGE analysis.
<b>Biological activity</b>	ED <sub>50</sub> <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.
<b>Formulation</b>	Lyophilized, carrier free.
<b>Sterility</b>	Filtered before lyophilization through a 0.22 micron sterile filter.
<b>Endotoxin</b>	<0.1 ng/µg
<b>Production</b>	Produced in <i>E. coli</i> and purified via sequential chromatography.
<b>Reconstitution recommendation</b>	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.
<b>Suggested working dilutions</b>	The optimal concentration should be determined for each specific application.
<b>Storage</b>	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.
<b>Expiration date</b>	Expires one year from date of receipt when stored as instructed.
<b>References</b>	Que, J, et al. (2006) Morphogenesis of the trachea and esophagus: current players and new roles for noggin and Bmps. <i>Differentiation</i> 74(7):422-437. Yanagita, M. (2005) BMP antagonists: their roles in development and involvement in pathophysiology. <i>Cytokine Growth Factor Rev.</i> 16(3):309-317. Chen, D, et al. (2004) Bone morphogenetic proteins. <i>Growth Factors</i> 22(4):233-241. Sebald, W, et al. (2004) Molecular recognition in bone morphogenetic protein (BMP)/receptor interaction. <i>Biol. Chem.</i> 385(8):697-710.

## Limited product warranty

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## 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

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