

Recombinant Human Noggin

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Catalog Number:	PHC1506
Quantity:	20 μg
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.
Biological Activity:	The biological activity was determined by measuring the dose dependent inhibition of the 5 ng/mL BMP-4-induced alkaline phosphatase production by ATDC-5 chondrogenic cells. The expected ED $_{50}$ for this effect is 0.05–0.08 µg/mL of Noggin. The optimal concentration for each specific application should be determined by an initial dose-response assay.
Formulation:	Lyophilized, carrier free.
Sterility:	Filtered through a 0.22 micron filter prior to lyophilization.
Endotoxin:	<0.1 ng/μg
Production:	Recombinant human Noggin is produced in <i>E. coli</i> and purified via sequential chromatography.
Reconstitution Recommendation:	We recommend that the vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute lyophilized recombinant human Noggin in 10 mM acetic acid to a concentration of 0.1–1.0 mg/mL. Further dilutions should be made 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:	This lyophilized preparation is stable at room temperature for 3 weeks, but we recommend storage at -20° C, preferably desiccated. Upon reconstitution, the preparation can be stored at 4° C for 2–7 days, but should be stored at -20° C in working aliquots for future use. 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.

Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description
REF	Catalog Number
RUO	Research Use Only
Ω	Use by
	Manufacturer
[-]	Without, does not contain
trom Light	Protect from light
<u> </u>	Directs the user to consult instructions for use (IFU), accompanying the product.

Symbol	Description
LOT	Batch code
IVD	In vitro diagnostic medical device
X	Temperature limitation
EC REP	European Community authorized representative
[+]	With, contains
<u> </u>	Consult accompanying documents

Limited Use Label License: Research Use Only

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 $\label{lem:continuous} \textbf{For Research Use Only. Caution: Not for human or animal the rapeutic or diagnostic use.}$

 $Manufacturing\ site:\ 7335\ Executive\ Way\ |\ Frederick,\ MD\ 21704\ |\ Toll\ Free\ in\ USA\ 800.955.6288$

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