



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 



Noggin, mouse recombinant (rmNOG)

Catalog No: 08549
Lot No: XXXXX
Source: E. coli
Synonyms: Noggin, SYM1, SYNS1, NOG

Background

The secreted polypeptide noggin, encoded by the NOG gene, binds and inactivates members of the transforming growth factor-beta (TGF-beta) superfamily signaling proteins, such as bone morphogenetic protein-4 (BMP4). By diffusing through extracellular matrices more efficiently than members of the TGF-beta superfamily, noggin may have a principal role in creating morphogenic gradients. Noggin appears to have pleiotropic effect, both early in development as well as in later stages. It was originally isolated from *Xenopus* based on its ability to restore normal dorsal-ventral body axis in embryos that had been artificially ventralized by UV treatment. The results of the mouse knockout of noggin suggest that it is involved in numerous developmental processes, such as neural tube fusion and joint formation. Recently, several dominant human NOG mutations in unrelated families with proximal symphalangism (SYM1) and multiple synostoses syndrome (SYNS1) were identified; both SYM1 and SYNS1 have multiple joint fusion as their principal feature, and map to the same region (17q22) as NOG. All NOG mutations altered evolutionarily conserved amino acid residues. The amino acid sequence of human noggin is highly homologous to that of *Xenopus*, rat and mouse.

Description

Noggin Mouse Recombinant produced in E.Coli is a non-glycosylated, disulfide-linked protein consisting of two 206 amino acid polypeptide chains, having a total molecular mass of approximately 46.4 kDa (each chain 23.2 kDa).

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2µm filtered solution in 30% acetonitrile, 0.1% TFA.

Solubility

It is recommended to be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 10 mM HAC to a concentration of 0.1-1.0 mg/mL. Further dilutions should be made in appropriate buffered solutions.

Stability

Lyophilized Noggin, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Mouse Noggin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino Acid Sequence

MQHYLHIRPA PSDNLPVLDL IEHPDPIFDP KEKDLNETLL RSLLGGHYDP GFMATSPPED RPPGGGGPAG GAEDLAELDQ
LLRQRPSGAM PSEIKGLEFS EGLAQGKKQR LSKKLRRLQ MWLWSQTFCP VLYAWNDLGS RFWPRYVKVG SCFSKRSCSV
PEGMVCKPSK SVHLTVLRWR CQRRGQRCGW IPIQYPIISE CKCSC

Biological Activity

The ED₅₀ as determined by inhibiting BMP-4-induced alkaline phosphatase production of murine ATDC5 cells is less than 2ng/ml, corresponding to a specific activity of > 5.0 × 10⁵ IU/mg in the presence of 5ng/ml BMP-4.



Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH