

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

Noggin belongs to a group of diffusible proteins that bind to ligands of the TGF- β (Transforming Growth Factor) family and regulate their activity by inhibiting their access to signaling receptors. Noggin was originally identified as a BMP4 antagonist whose action is critical for proper formation of the head and other dorsal structures. Noggin has been shown to modulate the activities of other BMPs including BMP2, 7, 13 and 14. Targeted deletion of noggin in mice results in prenatal death and recessive phenotype displaying a severely malformed skeletal system. Transgenic mice overexpressing noggin in mature osteoblasts display impaired osteoblastic differentiation, reduced bone formation, and severe osteoporosis

Catalog Number	1380-09
Product Name	Noggin, Murine Recombinant Murine NOG Noggin
Source	<i>Escherichia coli</i>
MW	~46.4 kDa (2x206 amino acid) (A non-disulfide linked homodimer consisting of two 206 amino acid polypeptide chains)
Sequence	MQHYLHIRPA PSDNLPLVDL IEHPDIFDP KEKDLNETLL RSLGGHYDP GFMATSPPED RPGGGGGPAG GAEDLAELDQ LLRQRPSGAM PSEIKGLEFS EGQAQGGKQR LSKKLRRLKQ MWLWSQTFCP VLYAWNDLGS RFWPRYVKVG SCFSKRSCSV PEGMVCKPSK SVHLTVLRWR CQRRGGQRCG WIPIQYPIIS ECKCSC
Accession Number	P97466
Purity	>95% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active compared to standard. The ED ₅₀ as determined by inhibiting BMP-4 induced alkaline phosphatase production of murine ATDC5 cells is less than 2 ng/ml, corresponding to a specific activity of >5.0x10 ⁵ IU/mg in the presence of 5 ng/ml BMP-4.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in aqueous buffer containing 10mM HAc to a concentration of <0.25 mg/ml. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions