

## Recombinant Human Noggin

Catalog No: #AP60125



Package Size: #AP60125-1 5ug #AP60125-2 100ug #AP60125-3 500ug

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

Product Name	Recombinant Human Noggin
Host Species	E.coli
Purification	> 95 % by SDS-PAGE and HPLC analyses.
Uniprot	Q13253
GenID	9241
Calculated MW	Approximately 46.3 kDa, non-disulfide-linked homodimer consisting of two 206 amino acid polypeptide chains.
Target Sequence	MQHYLHIRPA PSDNLPLVDL IEHPDPIFDP KEKDLNETLL RLLGGHYDP GFMATSPPED RPPGGGGGAAG GAEDLAELDQ LLRQRPSGAM PSEIKGLEFS EGLAQGKKQR LSKKLRRKLQ MWLWSQTFCP VLYAWNDLGS RFWPRYVKVG SCFSKRSCSV PEGMVCKPSK SVHLTVLRWR CQRRGGQRCG WIPIQYPIIS ECKCSC
Formulation	LyophilizedB fromB aB 0.2B umB filteredB concentratedB solutionB inB PBS.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.- 12 months from date of receipt, -20 to -70 °C as supplied.- 1 month, 2 to 8 °C under sterile conditions after reconstitution.- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

## Background

Noggin encoded by the NOG gene, was first isolated from *Xenopus*, having the function of inducing secondary axis formation in frog embryos. It inhibits TGF- $\beta$  family ligands and preventing them from binding to their corresponding receptors. Noggin was originally found as a BMP-4 antagonist, and then has been shown to modulate the activities of other BMPs (BMP-2, 7, 13 and 14). Additionally, it has pleiotropic effect, both in early development and later stages. 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. In recent report, proximal symphalangism (SYM1) and multiple synostoses syndrome (SYNS1) have relation with the mutant of evolutionarily conserved amino acid residues of Noggin. Mature human Noggin shares 99 %, 99 %, 98 %, 97 % and 89 % a.a. sequence identity with mouse, rat, bovine, equine and chicken Noggin, respectively.

Note: This product is for in vitro research use only