

## Noggin, Mouse(CHO-expressed)

**Cat. No.:** Z03205-25

**Size:** 25.0 ug

**Synonyms:** NOG

### Description:

Noggin, also known as NOG, is a homodimeric glycoprotein that binds to and modulates the activity of TGF-beta family ligands. It is expressed in condensing cartilage and immature chondrocytes. Noggin antagonizes bone morphogenetic protein (BMP) activities by blocking epitopes on BMPs needed for binding to their receptors. Noggin has been shown to be involved in many developmental processes, such as neural tube formation and joint formation. During development, Noggin diffuses through extracellular matrices and forms morphogenic gradients that regulate cellular responses in a concentration-dependent manner.

### Amino Acid Sequence:

```
00001 LRAAPAGGQH YLHIRPAPSD NLPLVDLIEH PDPIFDPKEK
00041 DLNETLLRSL LGGHYDPGFM ATSPPEDRPG GGGGPAGGAE
00081 DLAEIQLLR QRPSGAMPSE IKGLEFSEGL AQQKKQRLSK
00121 KLRRKLMWL WSQTFCPLY AWNDLGSRFW PRYVKVGSFC
00161 SKRSCSVPEG MVCKPSKSVH LTVLRWRCQR RGGQRCGWIP
00201 IQYPIISECK CSC
```

**Source:** CHO

**Species:** Mouse

**Biological Activity:** ED<sub>50</sub> < 60 ng/ml, measured in a bioassay using ATDC5 cells in the presence of 10 ng/ml human BMP-4.

**Molecular Weight:** 29-31 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

**Purity:** > 95% as analyzed by SDS-PAGE.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant murine Noggin remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, murine Noggin should be stable up to 1 week at 4°C or up to 2 months at -20°C.