

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant Noggin, Mouse(CHO-expressed)

Catalog Number: BK0278-5 $\mu$ g

Source: CHO

Quantity: 5 $\mu$ g

### 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.

### Molecular Weight:

29-31 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### 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.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

LRAAPAGGQHLYHIR-  
PAPSDNLPLVDLIEHPDPIFDP-  
KEKDLNETLLRSLLGGHYDPGF-  
MATSPPEDRPGGGGGPAG-  
GAEDLAELDQLLRQRPSGAMPSEIKGLEF-  
SEGLAQGGKQRLSKKLRRKLMWL-  
WSQTFPCVLYAWNDLGSRFWPRYVKVGSCF-  
SKRSCSVPEGMVCKPSKSVHLTVLR-  
WRCQRRGGQRCGWIPYIPISECKCSC

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.

### Storage:

Lyophilized recombinant murine Noggin remains stable up to 6 months at -80 °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.

### Usage:

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