

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Noggin, Human(CHO-expressed)

Catalog Number: BK0277-50µg

Source: CHO

Quantity: 50µg

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, regulating cellular responses dependent on the local concentration of the signaling molecule.

Molecular Weight:

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

Purity:

> 95% as analyzed by SDS-PAGE.

Biological Activity:

ED50 < 2.5 ng/ml, measured in a bioassay using ATDC5 cells in the presence of 10ng/ml human BMP-4.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

QHYLHIRPAPSDNLPLVDLIEHPDPIFDP-
KEKDLNETLLRSLLGGHYDPGF-
MATSPPEDRPGGGG-
GAAGGAEDLAELDQLLRQPSGAMPSEIKGLEF
SEGLAQGKKQRLSKKLRRKLMWL-
WSQTFCPVLYAWNLDGSRFWPRYVKVGSCF-
SKRSCSVPEGMVCKPSKSVHLTVLR-
WRCQRRGGQRCGWIPYIPISECKCSC

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 µg/ml.

Storage:

Lyophilized recombinant human Noggin remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, human Noggin should be stable up to 1 week at 4 °C or up to 2 months at -20 °C.

Usage:

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