DATASHEET
Version 20181206

Noggin, Human(CHO-expressed)

Cat. No.: Z03212-50

Size: 50.0 ug

Synonyms: NOG

Description:

Noggin, also known as NOG, is a homodimeric glycoprotein that bindsto 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.

Amino Acid Sequence:

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00001 QHYLHIRPAP SDNLPLVDLI EHPDPIFDPK EKDLNETLLR
00041 SLLGGHYDPG FMATSPPEDR PGGGGGAAGG AEDLAELDQL
00081 LRQRPSGAMP SEIKGLEFSE GLAQGKKQRL SKKLRRKLQM
00121 WLWSQTFCPV LYAWNDLGSR FWPRYVKVGS CFSKRSCSVP
00161 EGMVCKPSKS VHLTVLRWRC QRRGGQRCGW IPIQYPIISE
00201 CKCSC
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Source: *CHO*

Species: Human

Biological Activity: ED_{50}<2.5 ng/ml, measured in a bioassay using ATDC5 cells in the presence of 10ng/ml human BMP-4.

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

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH_2O 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 human Noggin remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, human Nogginshould be stable up to 1 week at 4°C or up to 2 months at -20°C.

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