

Rev04 Update: Mar,01,2022

## DATASHEET

## Noggin Fc Chimera, Human

Cat. No.: Z03380

## **Product Introduction**

Species	Human
Protein Construction	Noggin (Gln28-Cys232) Accession # Q13253hFcN-termC-term
Purity	> 97% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/µg of protein by gel clotting method
Biological Activity	ED <sub>50</sub> < 60.0 ng/ml, measured in a bioassay using ATDC5 cells in the presence of 10.0 ng/ml human BMP-4.
Expression System	СНО
Apparent Molecular Weight	~57 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Background

**Target Background :** 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.

Synonyms: NOG; SYM1; SYNS1; SYNS1A; noggin



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