

Human Noggin protein

Cat #:PRP100077

Lot #: Refer to product label

Recombinant Human Noggin Protein (Noggin) expressed in Human Cells.

Product Information

Product name Human Noggin protein

Specification

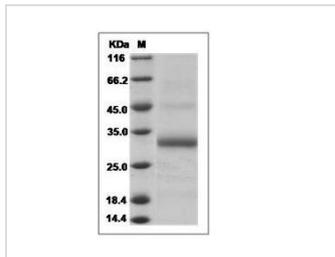


Fig.SDS-PAGE analysis of Human Noggin protein.

Product Properties

Storage instructions	Lyophilized Human Noggin protein product should be stored desiccated below -20°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature.
Precautions	The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.

Additional Information

Background	Noggin is a secreted protein involved at multiple stages of vertebrate embryonic development including neural induction and is known to exert its effects by inhibiting the bone morphogenetic protein (BMP)-signaling pathway. It binds several BMPs with very high (picomolar) affinities, with a marked preference for BMP2 and BMP4 over BMP7. By binding tightly to BMPs, Noggin prevents BMPs from binding their receptors. Noggin binds the bone morphogenetic proteins (BMP) such as BMP-4 and BMP-7, and inhibits BMP signaling by blocking the molecular interfaces of the binding epitopes for both type I and type II receptors. Interaction of BMP and its antagonist Noggin governs various developmental and cellular processes, including embryonic dorsal-ventral axis, induction of neural tissue, formation of joints in the skeletal system and neurogenesis in the adult brain. Noggin plays a key role in neural induction by inhibiting BMP4, along with other TGF- β signaling inhibitors such as chordin and follistatin. Mouse knockout experiments have demonstrated that noggin also plays a crucial role in bone development, joint formation, and neural tube fusion.
Gene ID	9241
Alternative names	Noggin; SYM1; SYNS1; Noggin; NOG
Others	The Endotoxin level is less than 1.0 EU per μ g protein as determined by the LAL method.
Accession	NP_005441.1