


## Human Noggin protein

Cat #: PRP1059

Size: 5µg/20µg/100µg/1mg

### Product Information

	<b>Product Name:</b> Human Noggin protein		
<b>REF</b>	<b>Catalog Number:</b> PRP1059	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Purity:</b> > 98 % as determined by SDS-PAGE		
	<b>Storage:</b> Store at -20°C		<b>Preparation method:</b> HEK293
	<b>Shipping:</b> The product is shipped at ambient temperature.		

**Background:** Noggin is a 46.2 kDa bioactive protein, which exists as a disulfide-linked homodimer (each chain 23.1 kDa). Noggin binds members of the Transforming Growth Factors-beta (TGF beta) superfamily signaling proteins, such as bone morphogenetic protein-4 (BMP-4), which inactivates their activities. As an extracellular antagonist of BMP proteins, Noggin involves in the development of many body tissues, including nerve tissue, muscles, and bones. In addition, Noggin is able to inhibit chondrocyte differentiation through its interaction with GDF5.

**Sequence:** Amino acid sequence derived from Human Noggin (Gln28-Cys232) (NP\_005441.1) was expressed with Human Fc tag at the C-terminus.

**Protein length:** The secreted Human Noggin consists of 205 amino acids and has a predicted molecular mass of 58 kDa.

**Biological Activity:** Measure by its ability to inhibit BMP-4-induced alkaline phosphatase production by ATDC5 cells. The ED<sub>50</sub> for this effect is <0.05 µg/mL in the presence of 50 ng/mL of recombinant Human BMP-4.

**Endotoxin:** < 0.1 EU per µg of the protein as determined by the LAL method.

**Formulation:** Lyophilized from sterile PBS, pH 7.4.

**Storage Instructions:** Lyophilized protein product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% BSA, 10% FBS or 5% HSA). Please prevent freeze-thaw cycles.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Human Noggin protein to a concentration of 0.1-1 mg/mL in sterile ddH<sub>2</sub>O, and keep at room temperature for at least 20 min to fully dissolve.

Please avoid vortex vigorously.

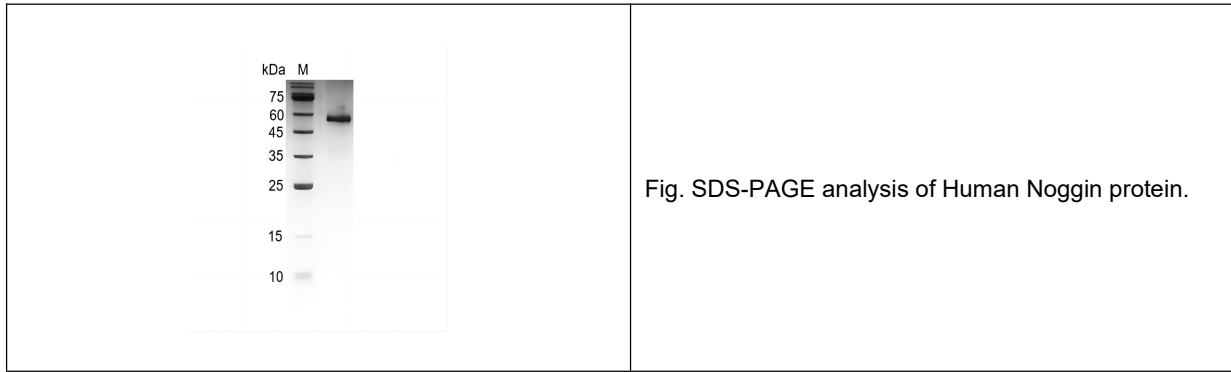


Fig. SDS-PAGE analysis of Human Noggin protein.

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