

## Recombinant Mouse Noggin/NOG Protein

RPCB1098

### Description

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This high-purity Recombinant Mouse Noggin/NOG Protein is supplied as a kit for advanced applications. The kit includes Bradford Reagent to quantify total protein concentration for accurate sample normalization (Optional).

### Protein Information

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<b>SKU:</b>	RPCB1098
<b>Contents:</b>	10 µg, 20 µg, 50 µg, 100 µg Bradford Reagent: 1 vial (2ml)
<b>Synonyms:</b>	noggin, NOG
<b>Species:</b>	Mouse
<b>Gene ID:</b>	18121
<b>Expression Host:</b>	HEK293 cells
<b>Tags:</b>	C-His
<b>Calculated MW:</b>	24.75 kDa
<b>Observed MW:</b>	36 kDa
<b>Purification:</b>	≥ 95 % as determined by SDS-PAGE.
<b>Endotoxin:</b>	< 1 EU/µg of the protein by LAL method.
<b>Formulation:</b>	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.
<b>Bio- Activity:</b>	1. Measured by its binding ability in a functional ELISA. Immobilized Human BMP4 at 0.5 µg/mL (100 µL/well) can bind Noggin with a linear range of 4-29 ng/mL.

2. Measured by its binding ability in a functional ELISA. Immobilized Human Noggin at 1 µg/mL (100 µL/well) can bind Noggin Rabbit pAb with a linear range of 1-4.95 ng/mL.
3. Measured by its ability to inhibit BMP-4-induced alkaline phosphatase production by ATDC5 mouse chondrogenic cells. The ED 50 for this effect is 3.5-14 ng/mL in the presence of 50 ng/mL of Recombinant Human BMP-4.

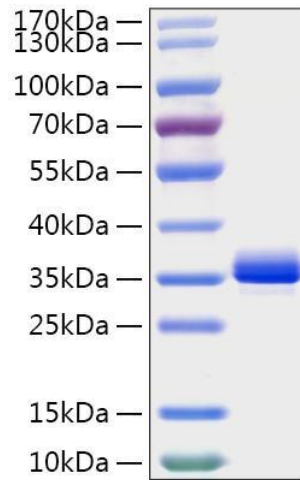
## Preparation & Storage

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- Shipping:** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
- Storage:** Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.  
Store Bradford Reagent at Room Temperature for 1 Year.
- Reconstitution:** Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.
- Protein Quantification (Optional):** To quantify total protein levels, use the Bradford Reagent included in this kit. Visit <https://www.assaygenie.com/bradford-protein-assay-protocol/> to view the full protocol.

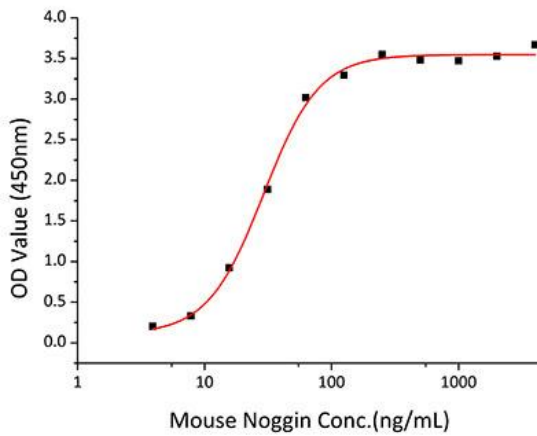
## Validation Data

### Image

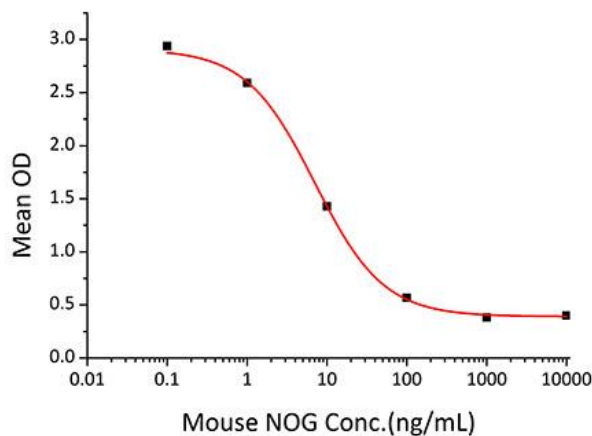


### Description

Recombinant Mouse Noggin/NOG Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized recombinant Human BMP4 at 0.5  $\mu\text{g/mL}$  (100  $\mu\text{L/well}$ ) can bind Noggin with a linear range of 4-29 ng/mL.



Recombinant human NOG inhibits BMP-4-induced alkaline phosphatase production by ATDC5 mouse chondrogenic cells. The ED50 for this effect is 3.5-14 ng/mL in the presence of 50 ng/mL of Recombinant Human BMP-4.