

RP01228

Leader in Biomolecular Solutions for Life Science



Recombinant Human Noggin/NOG Protein

Catalog No.: RP01228 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
CHO Cells	9241	Q13253

Tags

C-His

Synonyms

NOG;SYM1;SYNS1;SYNS1A;noggin

Product Information

Source	Purification
CHO Cells	≥ 90 % as determined by SDS-PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

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.

Contact



www.abclonal.com

Background

Basic Information

Description

Recombinant Human Noggin/NOG Protein is produced by CHO Cells expression system. The target protein is expressed with sequence (Gln28-Cys232) of human Noggin (Accession #NP_005441.1) fused with a 6×His tag at the C-terminus.

Bio-Activity

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 16-314 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 1-9 ng/mL. 3. Measured by its ability to inhibit BMP-4-induced alkaline phosphatase production by ATDC5 mouse chondrogenic cells. The ED₅₀ for this effect is 0.26-1.06 μg/mL in the presence of 50 ng/mL of Recombinant Human BMP-4.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

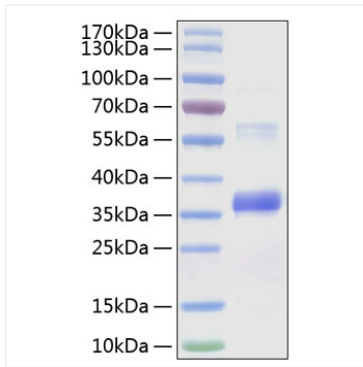
For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

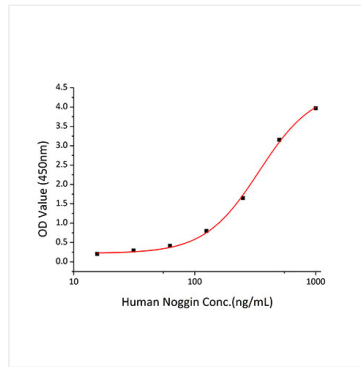
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

* For your safety and health, please wear a lab coat and disposable gloves when handling.

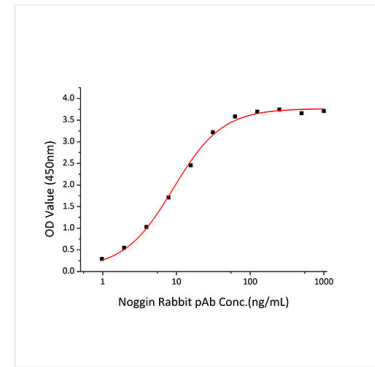
Validation Data



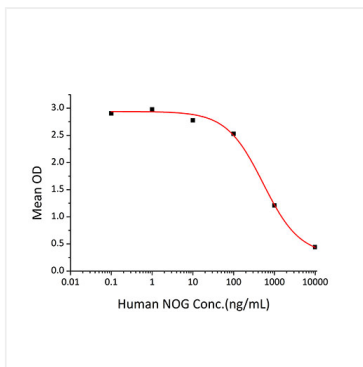
Recombinant Human Noggin/NOG Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized recombinant Human BMP4 at 0.5 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind Noggin with a linear range of 16-314 ng/mL.



Immobilized recombinant Human Noggin at 1 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind Noggin Rabbit pAb with a linear range of 1-9 ng/mL.



Recombinant human NOG inhibits BMP-4-induced alkaline phosphatase production by ATDC5 mouse chondrogenic cells. The ED_{50} for this effect is 0.26-1.06 $\mu\text{g/mL}$ in the presence of 50 ng/mL of Recombinant Human BMP-4.