

Recombinant Human Noggin/NOG Protein

RPCB0864

Description

This high-purity Recombinant Human 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

| | |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SKU: | RPCB0864 |
| Contents: | 10 µg, 20 µg, 50 µg, 100 µg Bradford Reagent: 1 vial (2ml) |
| Synonyms: | NOG, SYM1, SYNS1, SYNS1A, noggin |
| Species: | Human |
| Gene ID: | 9241 |
| Expression Host: | HEK293 cells |
| Tags: | C-His |
| Calculated MW: | 23.89 kDa |
| Observed MW: | 35-38 kDa |
| Purification: | ≥ 95 % as determined by SDS-PAGE. |
| Endotoxin: | < 0.1 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. |
| Bio- Activity: | 1. Measured by its binding ability in a functional ELISA. Immobilized Human BMP2 at 1 µg/mL (100 µL/well) can bind Noggin with a linear range of 2-57 ng/mL. 2. 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 |

Manufacturers Statement - This final kit system is assembled and quality-released by Assay Genie Limited

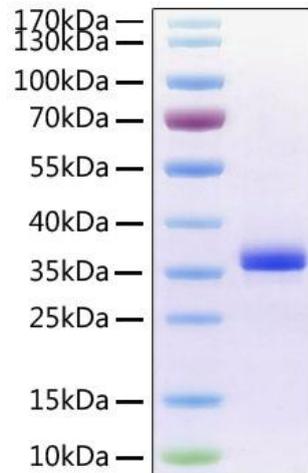
of 4-47 ng/mL. 3. Measured by its binding ability in a functional ELISA. Immobilized Human Noggin at 1 µg/mL (100 µL/well) can bind Noggin Rabbit pAb with a linear range of 1-3.5 ng/mL. 4. Measured by its ability to inhibit BMP-4-induced alkaline phosphatase production by ATDC5 mouse chondrogenic cells. The ED 50 for this effect is 13.28-53.12 ng/mL in the presence of 50 ng/mL of recombinant human BMP-4, corresponding to a specific activity of 1.88×10^4 - 7.53×10^4 units/mg.

Preparation & Storage

- 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.

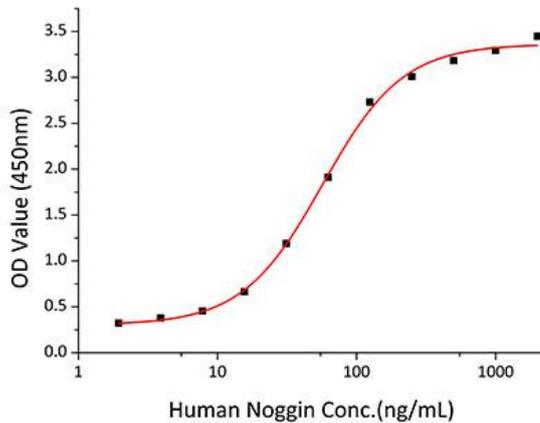
Validation Data

Image

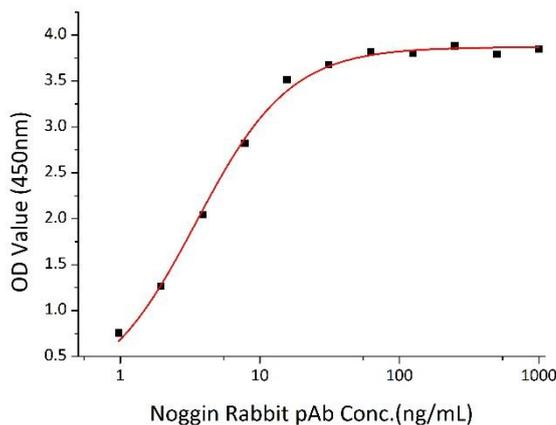


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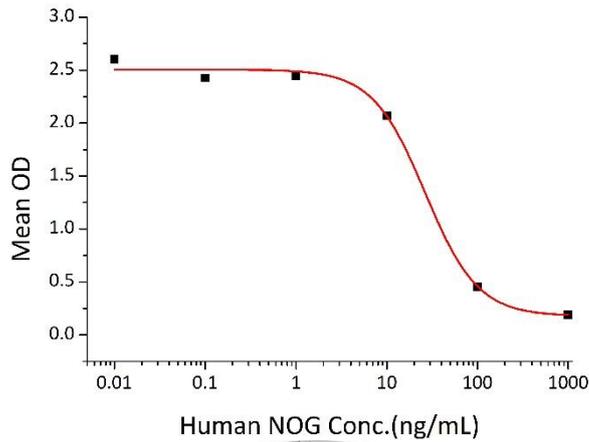
Recombinant Human Noggin/NOG Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



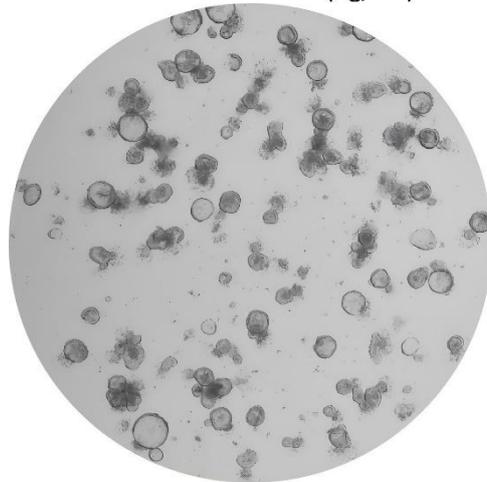
Immobilized recombinant Human BMP2 at 1 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind Noggin with a linear range of 2-57 ng/mL.



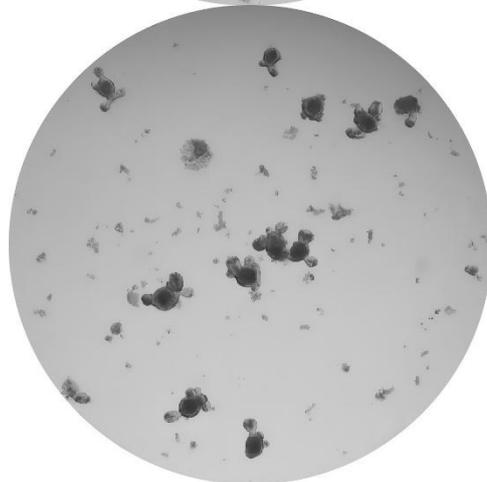
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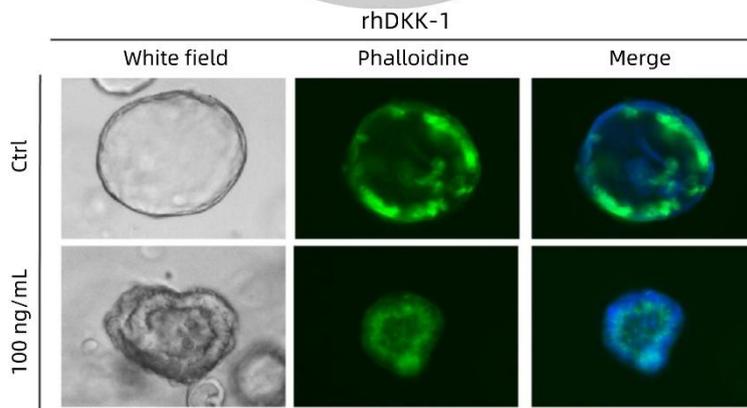
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Mouse large intestinal organoids were cultured with EGF, NOG(RPCB0864), RSPO1(RPCB0176), WNT-3a(Cat. RP01618SLQ)



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Human kidney organoids were cultured with EGF, FGF2(RPCB0853), FGF7(RPCB1793), FGF9(RPCB1059), FGF10(RPCB0828), IGF-(RPCB0759), NOG(RPCB0864), RSPO1(RPCB0176), WNT-3a(Cat. RP01618SLQ). And further, DKK-1(RPCB0891) was

used to induce the
establishment of cell polarity.