

# Rat Noggin protein, His and MBP tag

**Cat. No. GTX00055-pro**

<b>Application</b>	Functional Assay
<b>Species</b>	Rat

**Package**  
10 µg

## APPLICATION

### Application Note

NOG (Noggin) is a signaling molecule that plays an important role in promoting somite patterning in the developing embryo, essential for cartilage morphogenesis and joint formation. It is considered as an inhibitor in bone morphogenetic proteins (BMP) signaling, by binding with BMP4, thus a binding ELISA assay was conducted to detect the association of recombinant rat NOG with BMP4. Briefly, NOG were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to BMP4-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-NOG pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of NOG with BMP4 was in a dose dependent manner.

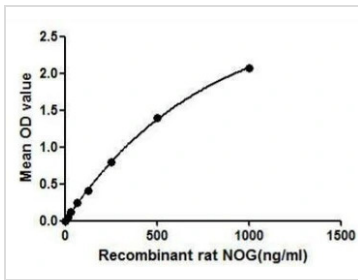
**Observed MW** 64 kDa.

## PROPERTIES

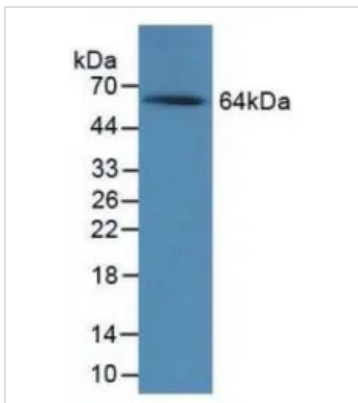
<b>Form</b>	Lyophilized powder
<b>Buffer</b>	Reconstitute with 10mM PBS (pH7.4) to 0.1-1.0mg/ml. Do not vortex. Lyophilized from PBS (pH7.4), 0.01% SKL, 1mM DTT, 5% Trehalose.
<b>Preservative</b>	ProClin 300
<b>Storage</b>	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
<b>Region/Sequence</b>	N-terminal His and MBP-Tag; Met28~Cys144
<b>Expression System</b>	E. coli
<b>Purity</b>	> 97%
<b>Endotoxin</b>	< 1 EU/µg
<b>Conjugation</b>	Unconjugated
<b>Note</b>	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



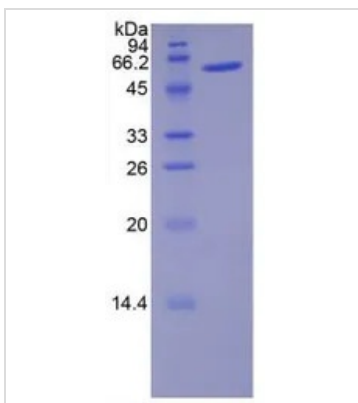
For full product information, images and publications, please visit our [website](#).

**DATA IMAGES**

**GTX00055-pro Functional Assay Image**

Functional ELISA analysis of GTX00055-pro Rat Noggin protein which can bind immobilized BMP4 protein.


**GTX00055-pro Image**

WB analysis of GTX00055-pro Rat Noggin protein.


**GTX00055-pro Image**

SDS-PAGE analysis of GTX00055-pro Rat Noggin protein.



For full product information, images and publications, please visit our [website](https://www.genetex.com).