

## Basic Information

Product Name	Anti-Noggin/NOG Antibody	
Gene Name	NOG	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E. coli-derived human Noggin recombinant protein (Position: L43-T153).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	26 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:100-500 Enzyme linked immunosorbent assay (ELISA): 1:100-1000	

## Storage

12 months from date of receipt, -20°C as supplied.

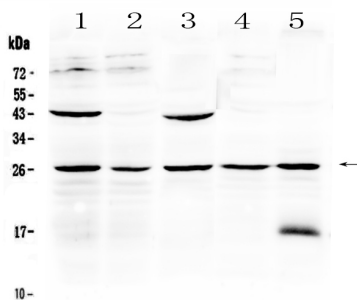
## Background Information

The secreted polypeptide, encoded by NOG gene, binds and inactivates members of the transforming growth factor-beta (TGF-beta) superfamily signaling proteins, such as bone morphogenetic protein-4 (BMP4). By diffusing through extracellular matrices more efficiently than members of the TGF-beta superfamily, this protein may have a principal role in creating morphogenic gradients. The protein appears to have pleiotropic effect, both early in development as well as in later stages. It was originally isolated from *Xenopus* based on its ability to restore normal dorsal-ventral body axis in embryos that had been artificially ventralized by UV treatment. The results of the mouse knockout of the ortholog suggest that it is involved in numerous developmental processes, such as neural tube fusion and joint formation. Recently, several dominant human NOG mutations in unrelated families with proximal symphalangism (SYM1) and multiple synostoses syndrome (SYNS1) were identified; both SYM1 and SYNS1 have multiple joint fusion as their principal feature, and map to the same region (17q22) as this gene. All of these mutations altered evolutionarily conserved amino acid residues. The amino acid sequence of this human gene is highly homologous to that of *Xenopus*, rat and mouse.

## Reference

Anti-Noggin/NOG Antibody被引用在2文献中。

## Selected Validation Data



Western blot analysis of Noggin/NOG using anti-Noggin/NOG antibody (A04448-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

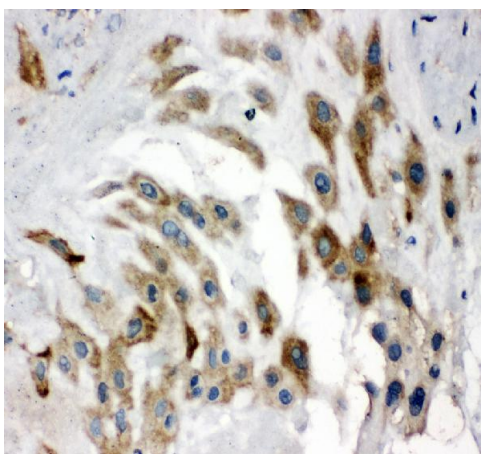
Lane 2: human MCF-7 whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human A375 whole cell lysates,

Lane 5: human 22RV1 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Noggin/NOG antigen affinity purified polyclonal antibody (A04448-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Noggin/NOG at approximately 26 kDa. The expected band size for Noggin/NOG is at 26 kDa.



IHC analysis of Noggin/NOG using anti-Noggin/NOG antibody (A04448-1) .

Noggin/NOG was detected in a paraffin-embedded section of human placenta tissue. The tissue section was incubated with rabbit anti-Noggin/NOG Antibody (A04448-1) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.