

## Product datasheet for **TA368099**

### Noggin (NOG) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	IHC: 25-100 Positive control: Human gastric cancer Predicted cell location: Cytoplasm
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide of human NOG
Formulation:	pH7.4 PBS, 0.05% NaN <sub>3</sub> , 40% Glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C.
Stability:	1 year
Gene Name:	noggin
Database Link:	<a href="#">Entrez Gene 9241 Human Q13253</a>



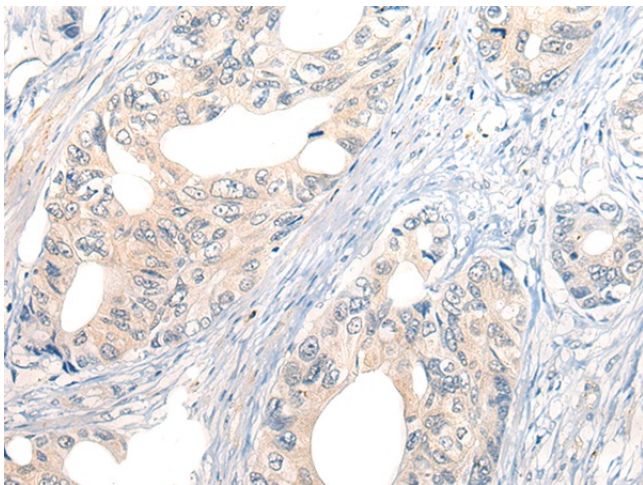
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**Background:**

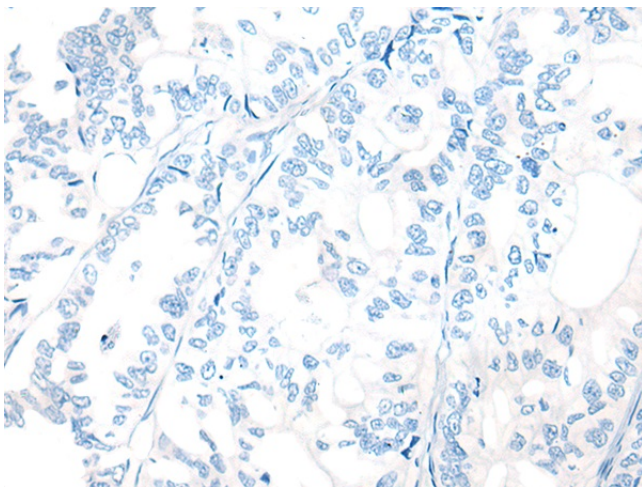
The secreted polypeptide, encoded by this gene, binds and inactivates members of the transforming growth factor-beta (TGF-beta) superfamily signaling proteins, such as bone morphogenetic protein-4 (BMP4). By diffusing through extracellular matrices more efficiently than members of the TGF-beta superfamily, 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.

**Synonyms:**

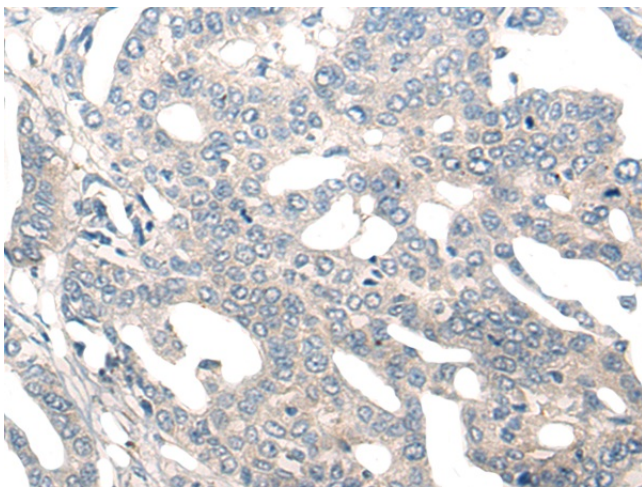
noggin; SYM1; SYNS1

**Product images:**

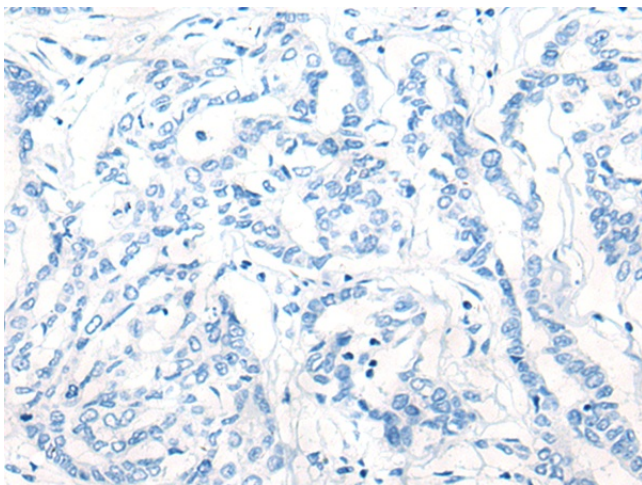
Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using TA368099 (NOG Antibody) at dilution 1/50 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using TA368099 (NOG Antibody) at dilution 1/50, treated with synthetic peptide. (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA368099 (NOG Antibody) at dilution 1/50 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA368099 (NOG Antibody) at dilution 1/50, treated with synthetic peptide. (Original magnification: ×200)