

## NOG Antibody

Catalog No: #46628

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

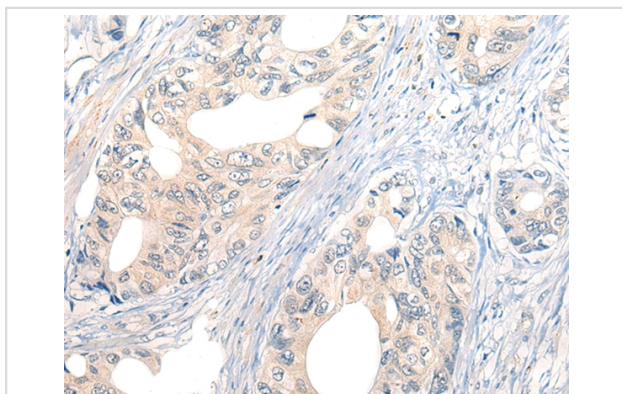
## Description

Product Name	NOG Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antigen affinity purification
Applications	IHC
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of total NOG protein.
Immunogen Type	peptide
Immunogen Description	Synthetic peptide corresponding to internal residues of human NOG
Target Name	NOG
Other Names	SYM1; SYNS1; SYNS1A
Accession No.	Swiss-Prot:Q13253 NCBI Gene ID:9241NCBI Protein:NP_005441
Uniprot	Q13253
GeneID	9241;
Concentration	1.9mg/ml
Formulation	Rabbit IgG in pH7.4 PBS, 0.05% NaN <sub>3</sub> , 40% Glycerol.
Storage	Store at -20°C

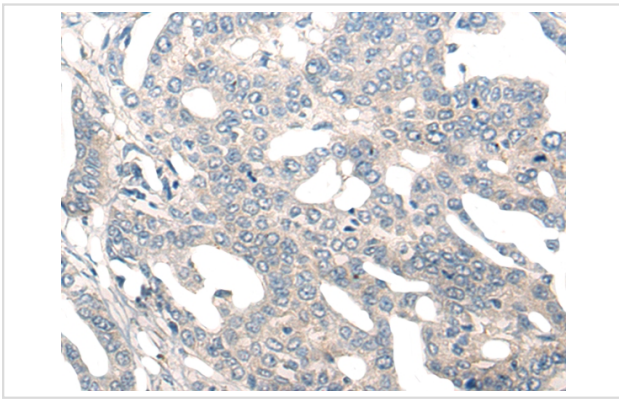
## Application Details

Immunohistochemistry: 1: 25-100

## Images



The image on the left is immunohistochemistry of paraffin-embedded Human gastric cancer tissue using 46628(NOG Antibody) at dilution 1/50, on the right is treated with synthetic peptide. (Original magnification: x200)



The image on the left is immunohistochemistry of paraffin-embedded Human liver cancer tissue using 46628(NOG Antibody) at dilution 1/50, on the right is treated with synthetic peptide. (Original magnification: x200)

## 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.

Note: This product is for in vitro research use only