

DNAxPab

Hard-to-Find
Antibody

NOG DNAxPab

Catalog # H00009241-W01P

Size 200 ug

Specification

Product Description	Rabbit polyclonal antibody raised against a full-length human NOG DNA using DNAx™ Immune technology.
Technology	DNAx™ Immune
Immunogen	Full-length human DNA
Sequence	MERCPSLGVTLYALVVVLGLRATPAGGQHYLHIRPAPSDNLPLVDLIEHPDPIFDPKEKDLNETLLR SLLGGHYDPGFMATSPPEDRPGGGGGAAGGAEDLAELDQLLRQRPSGAMPSEIKGLEFSEGLA QGKKQRLSKKLRRKLQMWLWSQTFCPVLYAWNDLGSRFWPRYVKVGSCFSKRSCSVPEGMV CKPSKSVHLTVLRWRCQRRGGQRCGWIPYIPISECKCSC
Host	Rabbit
Reactivity	Human
Purification	Protein A
Quality Control Testing	Antibody reactive against mammalian transfected lysate.
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- Immunofluorescence (Transfected cell)
- Flow Cytometry (Transfected cell)

Gene Info — NOG

Entrez GeneID [9241](#)

GeneBank Accession# [NM_005450.2](#)

Protein Accession# [NP_005441.1](#)

Gene Name NOG

Gene Alias SYM1, SYNS1

Gene Description noggin

Omim ID [184460](#) [185800](#) [186500](#) [186570](#) [602991](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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 knock out 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. [provided by RefSeq]

Other Designations symphalangism 1 (proximal)

Pathway

- [TGF-beta signaling pathway](#)

Disease

- [Diabetes Mellitus](#)
- [Genetic Predisposition to Disease](#)

- [Neural Tube Defects](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)