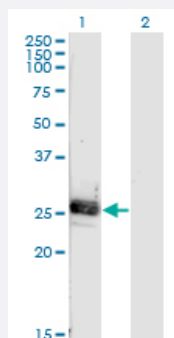


# NOG monoclonal antibody (M04), clone 4A1

Catalog # H00009241-M04

Size 100 ug

## Applications

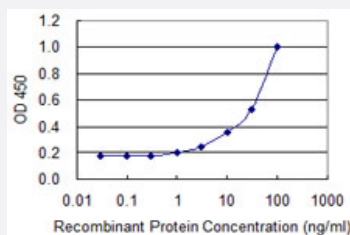


### Western Blot (Transfected lysate)

Western Blot analysis of NOG expression in transfected 293T cell line by NOG monoclonal antibody (M04), clone 4A1.

Lane 1: NOG transfected lysate(25.8 KDa).

Lane 2: Non-transfected lysate.



### Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged NOG is 0.3 ng/ml as a capture antibody.



Western Blot detection against Immunogen (48.29 KDa) .

## Specification

### Product Description

Mouse monoclonal antibody raised against a full length recombinant NOG.

<b>Immunogen</b>	NOG (AAH34027, 28 a.a. ~ 232 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Sequence</b>	QHYLHIRPAPSDNLPLVDLIEHPDPIFDPKEDLNETLLRSLGGHYDPGFMATSPPEDRPGGGGG AAGGAEDLAELDQLLRQRPSPGAMPSEIKGLEFSEGLAQGKKQRLSKKLRRKLQMWLWSQTFCP VLYAWNDLGSRFWPRYVKVGSCFSKRSCSVPEGMVCKPSKSVHLTVLRWRCQRRGGQRCGWI PIQYPIISECKCSC
<b>Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Interspecies Antigen Sequence</b>	Mouse (99); Rat (99)
<b>Isotype</b>	IgG2b Kappa
<b>Quality Control Testing</b>	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (48.29 KDa) .
<b>Storage Buffer</b>	In 1x PBS, pH 7.4
<b>Storage Instruction</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## Applications

- Western Blot (Transfected lysate)

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Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged NOG is 0.3 ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

## Gene Info — NOG

Entrez GeneID [9241](#)

GeneBank Accession# [BC034027](#)

Protein Accession# [AAH34027](#)

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](#)