

NOG Polyclonal Antibody

Catalog No.	A8305	Category	Polyclonal Antibodies
Applications	WB	Observed MW	28kDa
Cross-reactivity	Mouse, Rat	Calculated MW	25kDa

Immunogen Information

Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 28-232 of human NOG (NP_005441.1).
Gene ID	9241
Swiss prot	Q13253
Synonyms	NOG; SYM1; SYNS1; SYNS1A; noggin

Product information

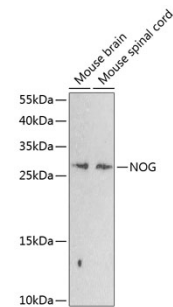
Source	Rabbit
Isotype	IgG
Purification method	Affinity purification
Storage	Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

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.

Recommended Dilutions

WB 1:500 -
1:2000



Western blot - NOG Polyclonal Antibody (A8305)