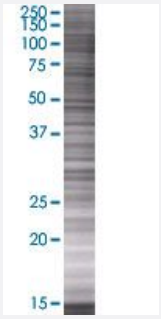
NOG 293T Cell Transient Overexpression Lysate(Denatured)

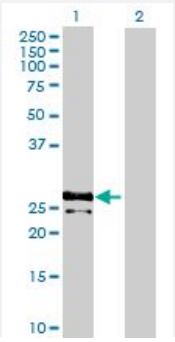
Catalog # H00009241-T01 Size 100 uL

Applications



SDS-PAGE Gel

NOG transfected lysate.



Western Blot

Lane 1: NOG transfected lysate (25.63 KDa)
Lane 2: Non-transfected lysate.

Specification

Transfected Cell Line	293T
Plasmid	pCMV-NOG full-length
Host	Human
Theoretical MW (kDa)	25.63
Interspecies Antigen Sequence	Mouse (99); Rat (99)

Quality Control Testing	Transient overexpression cell lysate was tested with Anti-NOG antibody (H00009241-B01) by Western Blots. SDS-PAGE Gel NOG transfected lysate. Western Blot Lane 1: NOG transfected lysate (25.63 KDa) Lane 2: Non-transfected lysate.
Storage Buffer	1X Sample Buffer (50 mM Tris-HCl, 2% SDS, 10% glycerol, 300 mM 2-mercaptoethanol, 0.01% Bromophenol blue)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot

Gene Info — NOG

Entrez GeneID	9241
GeneBank Accession#	NM_005450
Protein Accession#	NP_005441
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 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. [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