

Product datasheet for TA500116AM

OriGene Technologies, Inc.

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Noggin (NOG) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI1C1]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1C1

IF, IHC, WB **Applications:**

Recommended Dilution: WB: 1:40000, IHC 1:50, IF (1:100)

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Recombinant protein expressed in E.coli corresponding to amino acids 28-232 of human Immunogen:

noggin

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 0.5 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Biotin

Store at -20°C as received. Storage:

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 23.7 kDa Gene Name: noggin Database Link:

Entrez Gene 18121 MouseEntrez Gene 25495 RatEntrez Gene 9241 Human

013253

NP 005441





Background:

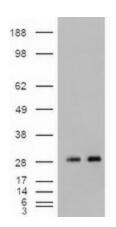
Noggin is a secreted polypeptide which binds and inactivates members of the transforming growth factor-beta (TGF-beta) superfamily signaling proteins, such as bone morphogenetic protein-4 (BMP4). By diffusing through extracellular matrices more efficiently than members of the TGF-beta superfamily, it may have a principal role in creating morphogenic gradients. Noggin appears to have pleiotropic effect, both early in development as well as in later stages. The results of the mouse knockout of the ortholog suggest that noggin 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

Synonyms: SYM1; SYNS1; SYNS1A

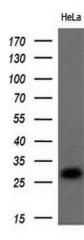
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: TGF-beta signaling pathway

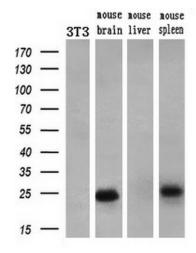
Product images:



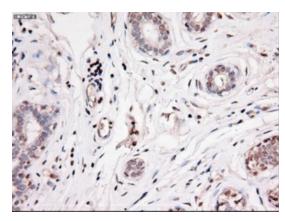
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY Nog ([RC205020], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-Nog. Positive lysates [LY401672] (100ug) and [LC401672] (20ug) can be purchased separately from OriGene.



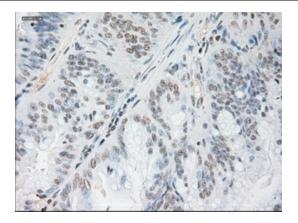
Western blot analysis of extracts (10ug) from 1 cell line by using anti-Nog monoclonal antibody at 1:200 dilution.



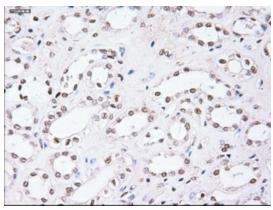
Western blot analysis of extracts (10ug) from a mouse cell line and 3 different mouse tissues by using anti-Nog monoclonal antibody (1:200).



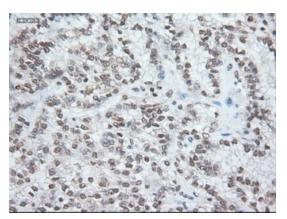
Immunohistochemical staining of paraffinembedded breast within the normal limits using anti-Nog ([TA500116]) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).



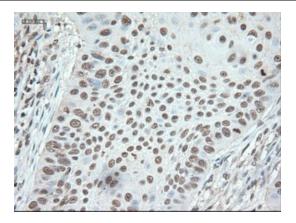
Immunohistochemical staining of paraffinembedded Adenocarcinoma of colon using anti-Nog ([TA500116]) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).



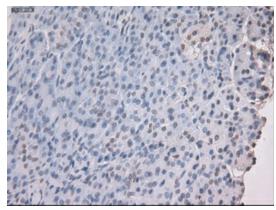
Immunohistochemical staining of paraffinembedded kidney within the normal limits using anti-Nog ([TA500116]) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).



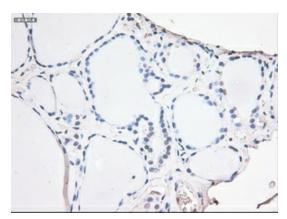
Immunohistochemical staining of paraffinembedded Carcinoma of kidney using anti-Nog ([TA500116]) mouse monoclonal antibody (Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).



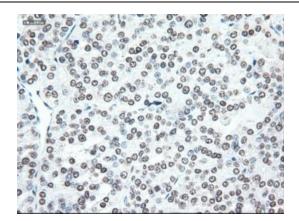
Immunohistochemical staining of paraffinembedded Carcinoma of lung using anti-Nog ([TA500116]) mouse monoclonal antibody (Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).



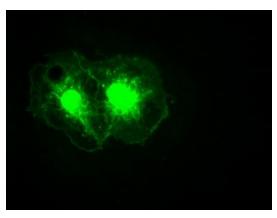
Immunohistochemical staining of paraffinembedded pancreas within the normal limits using anti-Nog ([TA500116]) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).



Immunohistochemical staining of paraffinembedded thyroid within the normal limits using anti-Nog ([TA500116]) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).



Immunohistochemical staining of paraffinembedded Carcinoma of thyroid using anti-Nog ([TA500116]) mouse monoclonal antibody (Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).



Anti-Nog mouse monoclonal antibody ([TA500116]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY Nog ([RC205020]).