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Product datasheet for CF500028

Noggin (NOG) Mouse Monoclonal Antibody [Clone ID: OTI4C12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4C12
Applications:	IF, IHC, WB
Recommended Dilution:	WB 1:1000~2000, IHC 1:50, IF 1:100
Reactivity:	Human, Dog, Mouse, Rat
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 28-232 of human noggin (NP_005441) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	23.7 kDa
Gene Name:	noggin
Database Link:	NP_005441 Entrez Gene 18121 MouseEntrez Gene 25495 RatEntrez Gene 100683515 DogEntrez Gene 9241 Human Q13253

View online »

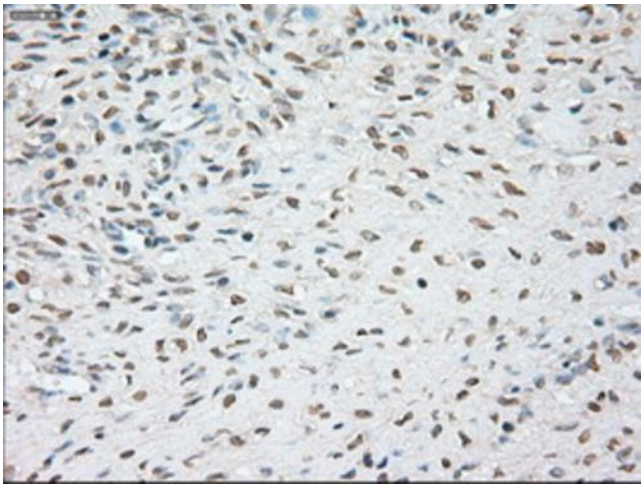
Background: Noggin is a secreted polypeptide which binds and inactivates members of the transforming growth factor-beta (TGF-beta) superfamily signaling proteins, such as bone morphogenetic protein-4 (BMP4). By diffusing through extracellular matrices more efficiently than members of the TGF-beta superfamily, 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

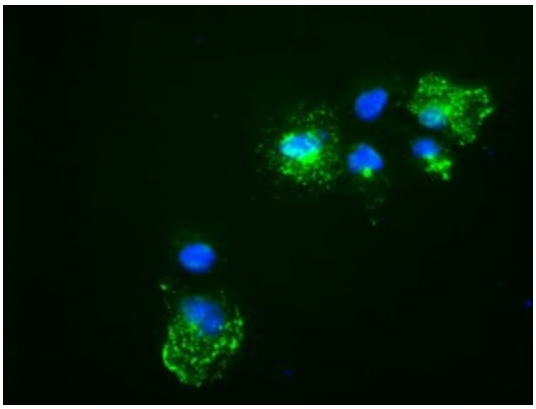
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: TGF-beta signaling pathway

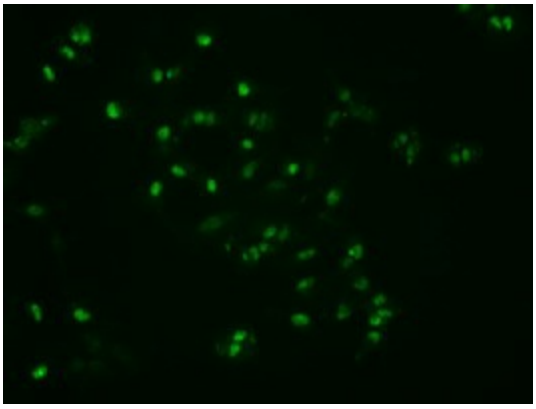
Product images:



Immunohistochemical staining of paraffin-embedded Human Ovary tissue within the normal limits using anti-Nog mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-Nog mouse monoclonal antibody ([TA500028]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY Nog ([RC205020]).



Immunofluorescent staining of A549 cells using anti-Nog mouse monoclonal antibody ([TA500028]).