

NOG RABBIT PAB

Cat.#: S221830

Product Name: Anti-NOG Rabbit Polyclonal Antibody

Synonyms: SYM1; SYNS1; SYNS1A

UNIPROT ID: Q13253 (Gene Accession - NP_005441)

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.

Immunogen: Synthetic peptide of human NOG

Applications: ELISA, IHC

Recommended Dilutions: IHC: 30-150; ELISA: 5000-10000

Host Species: Rabbit

Clonality: Rabbit Polyclonal

Isotype: Immunogen-specific rabbit IgG

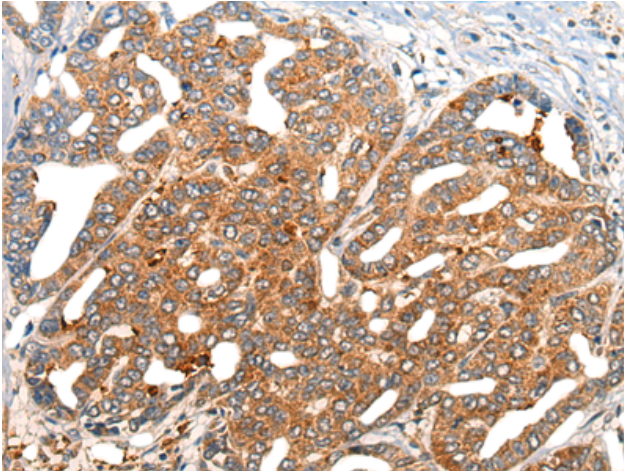
Purification: Antigen affinity purification

Species Reactivity: Human, Mouse

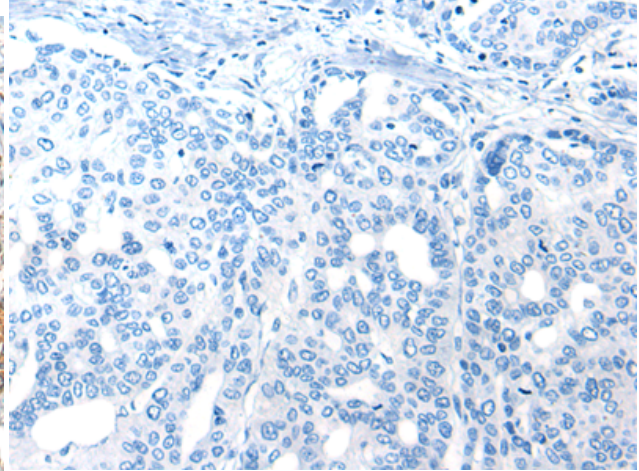
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

Research Areas: Signal Transduction, Developmental Biology

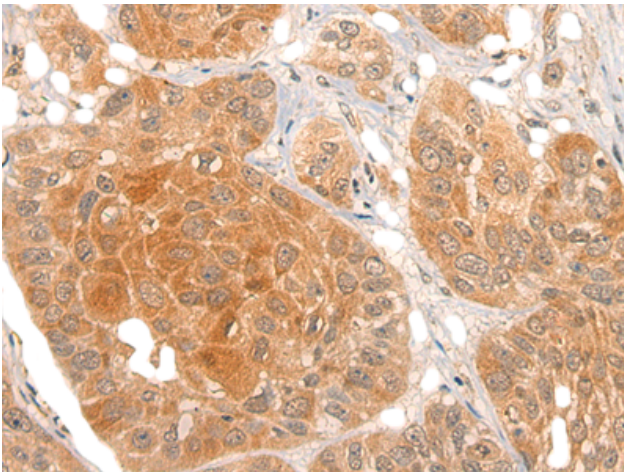
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



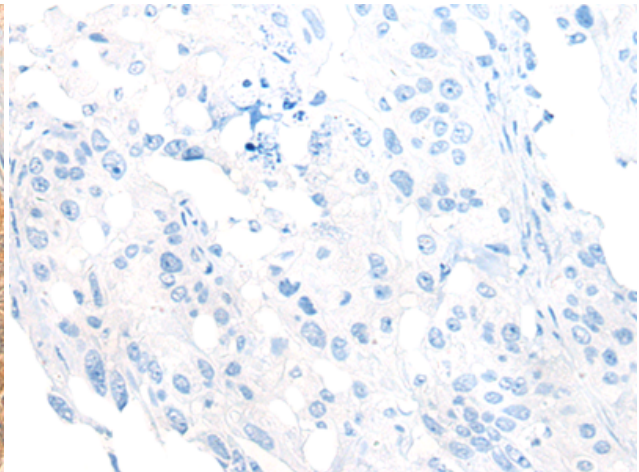
Immunohistochemistry analysis of paraffin embedded Human liver cancer tissue using 221830(NOG Antibody) at a dilution of 1/40(Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human liver cancer tissue is first treated with the synthetic peptide and then with 221830(Anti-NOG Antibody) at dilution 1/40.



The image on the left is immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using 221830(Anti-NOG Antibody) at a dilution of 1/40.



In comparison with the IHC on the left, the same paraffin-embedded Human esophagus cancer tissue is first treated with synthetic peptide and then with D263592(Anti-NOG Antibody) at dilution 1/40.