

## NOG RABBIT PAB

**Cat.#:** S218713

**Product Name:** Anti-NOG Rabbit Polyclonal Antibody

**Synonyms:** SYM1; SYNS1; SYNS1A

**UNIPROT ID:** Q13253

**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:** Fusion protein of human NOG

**Applications:** ELISA, IHC

**Recommended Dilutions:** IHC: 50-200; ELISA: 5000-10000

**Host Species:** Rabbit

**Clonality:** Rabbit Polyclonal

**Isotype:** Immunogen-specific rabbit IgG

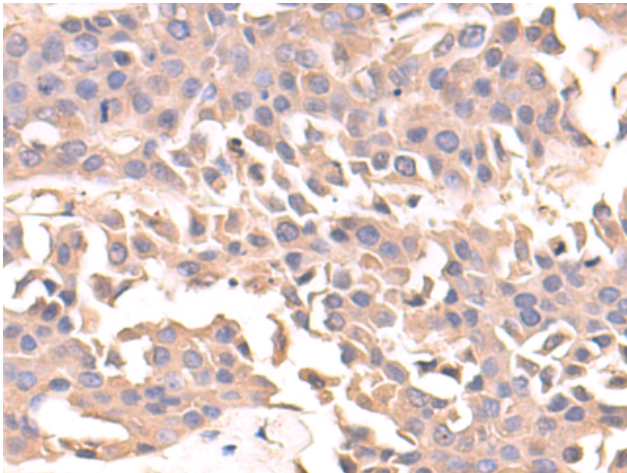
**Purification:** Antigen affinity purification

**Species Reactivity:** Human, Mouse

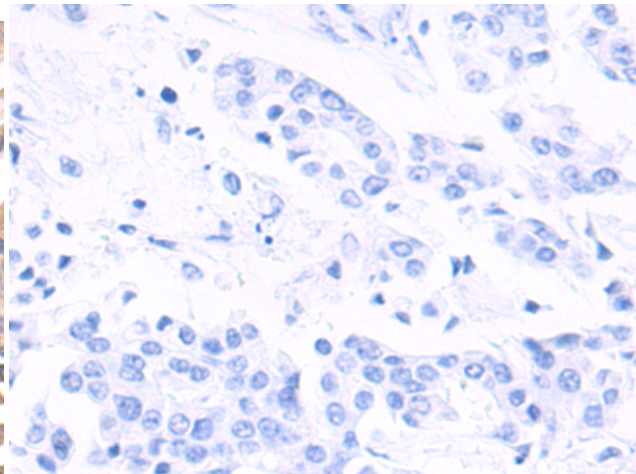
**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

**Research Areas:** Signal Transduction, Developmental Biology

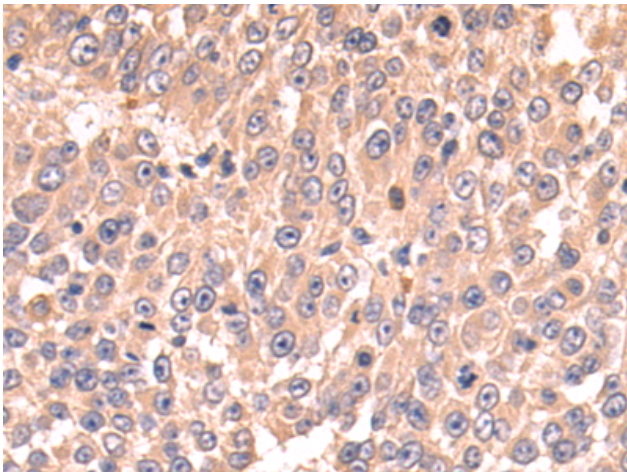
**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



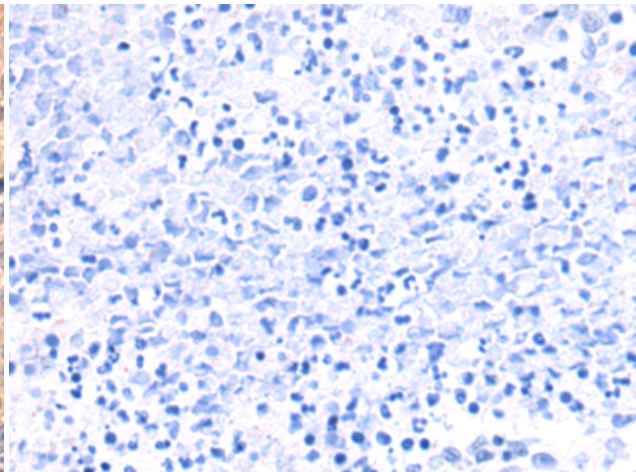
Immunohistochemistry analysis of paraffin embedded Human breast cancer tissue using 218713(anti-NOG Antibody) at a dilution of 1/70(Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human breast cancer tissue is first treated with the fusion protein and then with 218713(Anti-NOG Antibody) at dilution 1/70.



The image on the left is immunohistochemistry of paraffin-embedded Human bladder cancer tissue using 218713(Anti-NOG Antibody) at a dilution of 1/70.



In comparison with the IHC on the left, the same paraffin-embedded Human bladder cancer tissue is first treated with fusion protein and then with D225046(Anti-NOG Antibody) at dilution 1/70.