## **Elabscience**<sup>®</sup>

## **NOG Polyclonal Antibody**

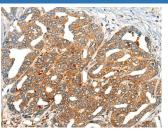
catalog number: E-AB-19756

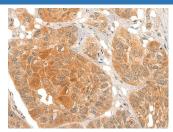
Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description  |  |
|--------------|--|
| Reactivity   | Human;Mouse  |
| Immunogen    | Synthetic peptide of human NOG   |
| Host         | Rabbit   |
| Isotype      | IgG  |
| Purification | Antigen affinity purification  |
| Conjugation  | Unconjugated   |
| Buffer       | Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol. |
|              |  |

| Applications | Recommended Dilution |
|--------------|----------------------|
| IHC          | 1:30-1:150           |

Data





Immunohistochemistry of paraffin-embedded Human liver cancer tissue using NOG Polyclonal Antibody at dilution of esophagus cancer tissue using NOG Polyclonal Antibody at 1:40(×200)

Immunohistochemistry of paraffin-embedded Human dilution of 1:40(×200)

| Preparation & Storage |   |
|-----------------------|---|
| Storage               | Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.               |
| Shipping              | The product is shipped with ice pack,upon receipt,store it immediately at the |
|                       | temperature recommended.  |

## Background

NOG (Noggin) is a Protein Coding gene. Diseases associated with NOG include Tarsal-Carpal Coalition Syndrome and Brachydactyly, Type B2. Among its related pathways are Mesodermal Commitment Pathway and Differentiation Pathway. GO annotations related to this gene include protein homodimerization activity and cytokine binding. The secreted polypeptide, encoded by this gene, binds and inactivates members of the transforming growth factor-beta (TG F-beta) superfamily signaling proteins, such as bone morphogenetic protein-4 (BMP4). 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.