

## bs-2975R

### • Rabbit Anti-Noggin Polyclonal Antibody

#### Primary Antibodies

#### Background:

Noggin is a secreted protein involved at multiple stages of vertebrate embryonic development including neural induction and is known to exert its effects by inhibiting the bone morphogenetic protein (BMP)-signaling pathway. It binds several BMPs with very high (picomolar) affinities, with a marked preference for BMP2 and BMP4 over BMP7. By binding tightly to BMPs, Noggin prevents BMPs from binding their receptors. Noggin binds the bone morphogenetic proteins (BMP) such as BMP-4 and BMP-7, and inhibits BMP signaling by blocking the molecular interfaces of the binding epitopes for both type I and type II receptors. Interaction of BMP and its antagonist Noggin governs various developmental and cellular processes, including embryonic dorsal-ventral axis, induction of neural tissue, formation of joints in the skeletal system and neurogenesis in the adult brain. Noggin plays a key role in neural induction by inhibiting BMP4, along with other TGF- $\beta$  signaling inhibitors such as chordin and follistatin. Mouse knockout experiments have demonstrated that noggin also plays a crucial role in bone development, joint formation, and neural tube fusion.

#### Source/Purification:

KLH conjugated synthetic peptide derived from human Noggin (35-74aa). Was purified by Protein A and peptide affinity chromatography.

**Storage:** Prepared as lyophilized powder or liquid and shipped on ice. Store at -20°C for one year.

#### Reconstitution:

If the antibody is in liquid form, no reconstitution needed.

Reconstitution is only required for the lyophilized antibody. Please refer to the reconstitution instruction card in the package.

**Size:** 100ul or 100ug lyophilized

**Concentration:** 1ug/uL

**Host:** Rabbit

#### Reactivities:

Human, Mouse, Rat, Dog, Pig, Cow, Horse, Sheep,

#### Application:

- WB(1:100-500)
- ELISA(1:500-1000)
- IP(1:20-100)
- IHC-P(1:100-500)
- IHC-F(1:100-500)
- IF(1:100-500)
- Not yet tested in other applications. Optimal working dilutions must be determined by the end user.

**Antibody Type:** Polyclonal

**Isotype:** IgG

**Molecular Weight:** 23kDa

#### Preservatives:

10ug/uL BSA and 0.1% NaN<sub>3</sub>.

For research use only. CAUTION: Not for human or animal therapeutic or diagnostic use.

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