

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **Noggin Polyclonal Antibody**

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Catalog: BS65619 Host: Rabbit Reactivity: man, Mouse, Rat, Chicken, Dog, Pi

g,Cow,Horse,Rabbit,Sheep,

## **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-β 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.

**Product:** 

0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

# **Molecular Weight:**

23kD

# **Swiss-Prot:**

O13253

### **Purification&Purity:**

affinity purified by Protein A

# **Applications:**

WB=1:500-2000

### **Storage&Stability:**

Store at  $4 \, \mathbb{C}$  short term. Aliquot and store at  $-20 \, \mathbb{C}$  long term. Avoid freeze-thaw cycles.

#### **Specificity:**

Noggin Polyclonal Antibody detects endogenous levels of Noggin protein.

# **DATA:**

#### Note:

For research use only, not for use in diagnostic procedure.

Bioworld Technology, Inc.

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