

Catalog No. LF-PA0092

POLYCLONAL ANTIBODY



Anti-Noggin

Background : Noggin is a 32 kDa glycoprotein that binds to bone morphogenetic protein (BMP) and antagonizes the action of them. Bone morphogenetic proteins were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo. BMPs also regulate cell proliferation, differentiation, lineage determination, motility, and death. BMP antagonists include noggin, chordin, follistatin, ventroptin, twisted gastrulation, Dan, and gremlin etc. They play a crucial role in bone development, by regulating the BMP functions.

Noggin plays a key role in neurulation by inhibiting BMP4, along with other morphogens such as chordin and follistatin and in the formation of the neural plate. Noggin inhibits BMP signaling by blocking the molecular interfaces of the binding epitopes for both type I and type II receptors. It antagonizes the action of BMPs, and induces neural tissue and dorsalizes ventral mesoderm.

Immunogen : Synthetic peptide (CEHPDPIFDPEKED)

Host : Rabbit

Composition : Hepes with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol

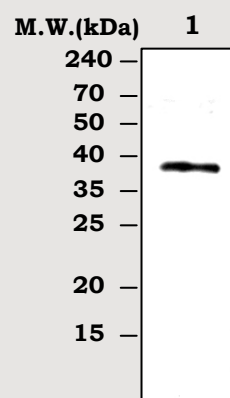
Size : 100 µl

Positive control : Recombinant mouse Noggin protein

Storage : Store for 1 year at -20°C from date of shipment

Species cross reactivity

Human	Mouse	Rat
+	+	-



Immunoblot Analysis

Lane 1 : recombinant mouse Noggin protein

Applications :

Western Blotting (1:1,000)

Background Reference :

- 1) Chang KH et al., 2007, Circulation. 116:1258-1266
- 2) Yanagita M, 2005, Cytokine Growth Factor Rev. 16(3):309-317
- 3) Canalis E et al., 2003, Endocr Rev. 2003 24(2):218-235