#### For Research Use Only

# NeutraControl Noggin Monoclonal antibody



Catalog Number: 69510-1-Ig

**Basic Information** 

Catalog Number: 69510-1-lg

Size: 1000 μ g/ml

Source: Mouse Isotype:

IgG2a

Immunogen Catalog Number:

HZ-1118

GenBank Accession Number:

GeneID (NCBI):

Full Name:

9241

Purification Method: Protein A purification

CloneNo.: 3B10F3

**Applications** 

**Tested Applications:** 

Non-Neutralization, ELISA

Species Specificity:

Human

## **Background Information**

Noggin is an extracellular polypeptide acting as an antagonist of bone morphogenetic proteins (BMPs) regulating embryonal development. Noggin inhibits activity of BMP-2, -4, -7, -13, and -14. Noggin is present extracellularly in the matrix or retained at the cell surface via interaction with heparin sulfate proteoglycans. In early development stages, Noggin is produced by the Spemann organizer, allowing dorsal-ventral patterning of BMPs (PMID: 8752214). Subsequently, Noggin is expressed by the notochord regulating BMP-4 signaling in neurogenesis. Additionally, Noggin is present during development in the dermal papilla, connective tissue of the hair follicle, lens, retina, and periocular mesenchyme, as well as in the mesoderm lineage regulating development of the bone, cartilage, and muscles.

This antibody is a neutralizing control antibody for Noggin, the immunogen is the same as Neutrakine 69010-1-lg but could not neutralize human Noggin.

Storage

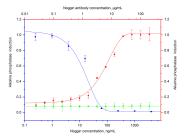
#### Storage

Lyophilized antibodies are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at(4°C) for short term or at(-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

Sterile PBS.

Aliquoting is unnecessary for -20°C storage

## **Selected Validation Data**



2.0 2.0 2.1.6 0.1.6

Recombinant human Noggin (Cat.NO. HZ-1118) inhibits BMP-4 induced alkaline phosphate production (using pNPP as chromogenic substrate for detection) by ATDC5 in a dose dependent manner (blue curve, refer to bottom X-left Y). The activity of human Noggin (40 ng/mL HZ-1118) is neutralized by mouse anti-human Noggin monoclonal antibody 69010-1-lg at serial dose (red curve, refer to top X-right Y). The ND50 is typically 5-20 µ g/mL The

