

## 32-20315: Animal-Free Recombinant Murine Noggin(Discontinued)

**Reactivity :** Mouse

### Description

**Source:**E.coli

Noggin belongs to a group of diffusible proteins that bind to ligands of the TGF- Beta family, and regulate their activity by inhibiting their access to signaling receptors. Noggin was originally identified as a BMP-4 antagonist whose action was critical for proper formation of the head and other dorsal structures. Consequently, noggin has been shown to modulate the activities of other BMPs including BMP-2,-7,-13, and -14. Targeted deletion of noggin in mice results in prenatal death, and a recessive phenotype displaying a severely malformed skeletal system. Conversely, transgenic mice over-expressing noggin in mature osteoblasts display impaired osteoblastic differentiation, reduced bone formation, and severe osteoporosis. Recombinant Murine Noggin is a 46.4 kDa disulfide-linked homodimer consisting of two 206 amino acid polypeptide chains.

### Product Info

**Amount :** 5 µg / 20 µg

**Purification :** Purity: >= 98% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** MQHYLHIRPA PSDNLPLVDL IEHPDPIFDP KEKDLNETLL RSLGGHYDP GFMATSPPED RPPGGGGPAG  
GAEDLAELDQ LLRQRPSGAM PSEIKGLEFS EQLAQGKKQR LSKKLRRKLQ MWLWSQTFCP  
VLYAWNDLGS RFWPRYVKVG SCFSKRSCSV PEGMVCKPSK SVHLTVLRWR CRRGGQRCG WIPIQYPIIS  
ECKCSC

### Application Note

Determined by its ability to inhibit 5.0 ng/ml of BMP-4 induced alkaline phosphatase production by ATDC5 chondrogenic cells. The expected ED<sub>50</sub> for this effect is 1.0-2.0 ng/ml of Noggin.