

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.Â Noggin was originally identified as a BMP-4 antagonist whose action was critical for proper formation of the head and other dorsal structures.Â Consequently, noggin has been shown to modulate the activities of other BMPs including BMP-2,-7,-13, and -14.Â Targeted deletion of noggin in mice results in prenatal death, and a recessive phenotype displaying a severely malformed skeletal system.Â Conversely, transgenic mice over-expressing noggin in mature osteoblasts display impaired osteoblastic differentiation, reduced bone formation, and severe osteoporosis.Â 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 RSLLGGHYDP GFMATSPPED RPPGGGGGPAG
GAEDLAELDQ LLRQRPSGAM PSEIKGLEFS EGLAQGKKQR LSKKLRRKLQ MWLWSQTFCP
VLYAWNDLGS RFWPRYVKVG SCFSKRSCSV PEGMVCKPSK SVHLTVLRWR CQRRGGQRCG 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 $\frac{1}{2}$ ED₅₀ for this effect is 1.0-2.0 ng/ml of Noggin.