

Noggin, Human CellExp™, human recombinant

CATALOG #: 6474-10 10 µg
6474-50 50 µg

ALTERNATE NAMES: SYM1, SYNS1, NOG.

SOURCE: Human 293 Cell Expressed

PURITY: > 95% by SDS - PAGE

MOL. WEIGHT: Recombinant human Noggin is a 46 kDa disulfide-linked homodimer consisting of two 206 amino acid polypeptide chains. Monomeric glycosylated Noggin migrates at an apparent molecular weight of approximately 28.0-33.0 kDa by SDS PAGE analysis under reducing conditions.

ENDOTOXIN LEVEL: < 1.0 EU per 1 µg of protein

FORMULATION: Lyophilized in PBS.

RECONSTITUTION: Reconstitute in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

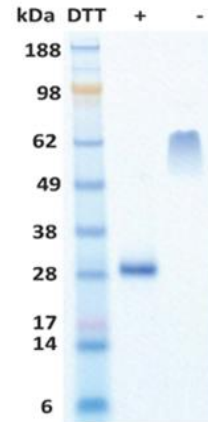
STORAGE CONDITIONS: Aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

ADVANTAGES: Animal-derived product free
High Activity
Authentic Glycosylation

DESCRIPTION: Human Noggin belongs to a group of diffusible proteins which bind to ligands of the TGF-β family and regulate their activity by inhibiting their access to signaling receptors. Noggin was originally identified as a BMP-4 antagonist whose action is 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 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 human Noggin is a 46 kDa disulfide-linked homodimer consisting of two 206 amino acid polypeptide chains. Monomeric glycosylated Noggin migrates at an apparent molecular weight of approximately 28.0-33.0 kDa by SDS PAGE analysis under reducing conditions.

BIOLOGICAL ACTIVITY: Determined by its ability to inhibit 5.0 ng/ml of BMP-4 induced alkaline phosphatase production by ATDC chondrogenic cells. The expected ED₅₀ for this effect is 2.0-3.0 ng/ml of Noggin.

AMINO ACID SEQUENCE: QHYLHIRPAP SDNLPLVDLI EHPDPIFDPK EKDLNETLLR
SLLGGHYDPG FMATSPPEDR PGGGGGAAGG AEDLAELDQL LRQRPSGAMP
SEIKGLEFSE GLAQQKKQRL SKKLRRKLQM WLWSQTFCPV LYAWNLDLGSR
FWPRYVKVGS CFSKRSCSVP EGMVCKPSKS VHLTCLRWRRC QRRGGQRCGW
IPIQYPIISE CKCSC



Human CellExp™ Human Recombinant Noggin

RELATED PRODUCTS:

- Noggin, human recombinant (Cat # 4675-20, -100, -1000)
- Noggin Antibody (Cat # 5775-100)
- Neuronal Transdifferentiation Modulators Set III (Cat # K874-4)
- Neuronal Transdifferentiation Modulators Set IV (Cat # K875-3)
- Human Cell^{exp} Human Recombinant BMP-2 (Cat # 6444-10, -50)
- Human Cell^{exp} Human Recombinant BMP-4 (Cat # 6445-10, -50)
- Human Cell^{exp} Human Recombinant BMP-7 (Cat # 6446-10, -50)
- BMP-10, human recombinant (Cat # 4581-20, -100, -1000)
- BMP-11, human recombinant (Cat # 4576-10, -50, -1000)
- BMP-12, human recombinant (Cat # 4572-20, -100, -1000)
- BMP-13, human recombinant (Cat # 4639-10, -50, -1000)
- BMP-14, human recombinant (Cat # 4580-10, -50, -1000)
- BMP-2, human recombinant (Cat # 4577-10, -50, -1000)
- BMP-3, human recombinant (Cat # 4573-10, -50, -1000)
- BMP-4, human recombinant (Cat # 4578-10, -50, -1000)
- BMP-5, human recombinant (Cat # 4574-10, -50, -1000)
- BMP-6, human recombinant (Cat # 4911-10, -50, -1000)
- BMP-7, human recombinant (Cat # 4579-10, -50, -1000)
- BMPR1A, human recombinant (Cat # 4881-10, -1000)

FOR RESEARCH USE ONLY! Not to be used in humans.