

RP00480

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Recombinant Mouse Noggin/NOG Protein

Catalog No.: RP00480

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Mouse	18121	P97466

Tags

C-6×His

Synonyms

noggin;NOG

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4. Contact us for customized product form or formulation.

Reconstitution

Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.

Background

Noggin is a secreted homodimeric glycoprotein that is an antagonist of bone morphogenetic proteins (BMPs). Mouse Noggin cDNA encodes a 232 amino acid (aa) residue precursor protein with 19 aa residue putative signal peptide that is cleaved to generate the 213 aa residue mature protein which is secreted as a homodimeric glycoprotein. Secreted Noggin probably remains close to the cell surface due to its binding of heparin-containing proteoglycans. Noggin binds some BMPs such as BMP4 with high affinity and others such as BMP7 with lower affinity. It antagonizes BMP bioactivities by blocking epitopes on BMPs that are needed for binding to both type I and type II receptors. Noggin is expressed in defined areas of the adult central nervous system and peripheral tissues such as lung, skeletal muscle and skin. During culture of human embryonic stem cells (hESC) or neural stem cells under certain conditions, addition of Noggin to antagonize BMP activity may allow stem cells to proliferate while maintaining their undifferentiated state, or alternatively, to differentiate into dopaminergic neurons.

Basic Information

Description

Recombinant Mouse Noggin/NOG Protein is produced by Human Cells expression system. The target protein is expressed with sequence (Gln28-Cys232) of mouse Noggin/NOG (Accession #P97466) fused with a 6×His tag at the C-terminus.

Bio-Activity

Storage

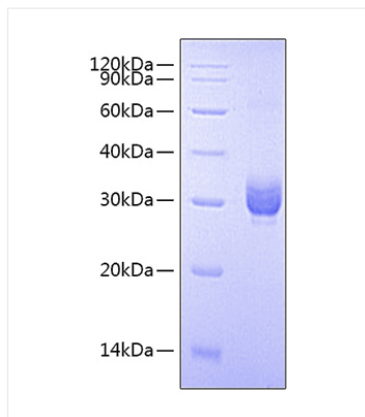
Store the lyophilized protein at -20 °C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact



www.abclonal.com

Validation Data



Recombinant Mouse Noggin/NOG Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.