

PRODUCT INFORMATION

Target	Noggin
Synonyms	Noggin;NOG
Description	Recombinant Human Noggin is produced by our Mammalian expression system and the target gene encoding Gln28-Cys232 is expressed with a Fc tag at the C-terminus.
Delivery	In Stock
Uniprot ID	Q13253
Expression Host	HEK293
Tag	C-Fc Tag
Molecular Characterization	Not available
Molecular Weight	50.2 KDa
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Formulation & Reconstitution	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Storage & Shipping	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Background	Noggin is a secreted homodimeric glycoprotein that is an antagonist of bone morphogenetic proteins (BMPs). Mature Human Noggin contains an N-terminal acidic region, a central basic heparin-binding segment and a C-terminal cysteine-knot structure. Noggin is very highly conserved among vertebrates, such that mature human Noggin shares 99%, 99%, 98%, 97% and 89% aa sequence identity with mouse, rat bovine, equine and chicken Noggin, respectively. 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.
Usage	Research use only



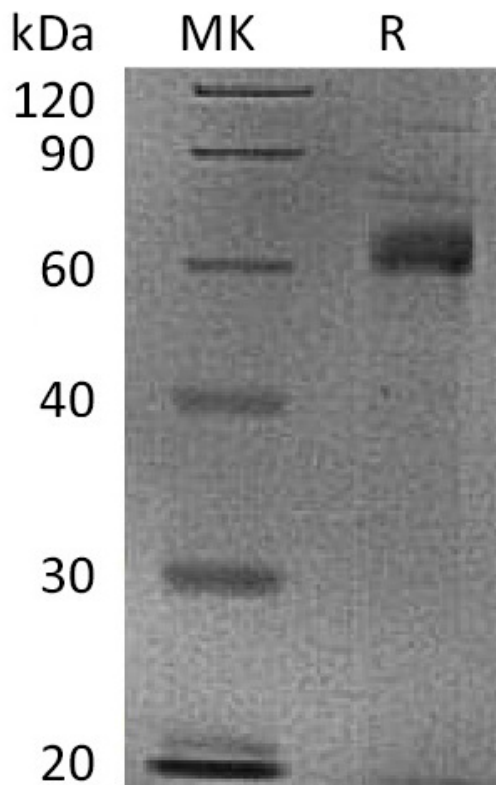


Figure 1. Greater than 95% as determined by reducing SDS-PAGE.

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