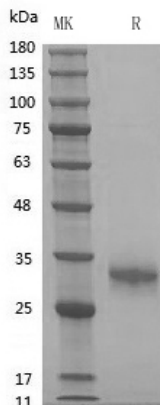


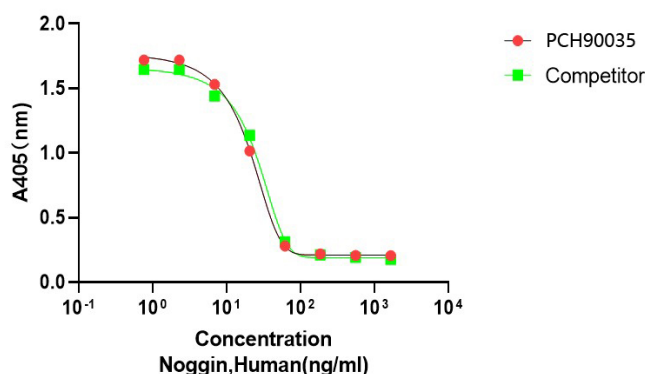
## Summary

|                              |   |
|------------------------------|---|
| <b>Name</b>                  | Noggin  |
| <b>Purity</b>                | Greater than 95% as determined by reducing SDS-PAGE   |
| <b>Endotoxin level</b>       | ≤10 EU/mg   |
| <b>Construction</b>          | Recombinant Human Noggin is produced by our Mammalian cell expression system and the target gene encoding Gln28-Cys232 is expressed.  |
| <b>Accession #</b>           | Q13253  |
| <b>Tag</b>                   | Tag free  |
| <b>Host</b>                  | Mammalian cell  |
| <b>Species</b>               | Human   |
| <b>Predicted MW</b>          | 23 kDa  |
| <b>Form</b>                  | Lyophilized   |
| <b>Buffer</b>                | PBS,5% mannitol and 0.01% Tween 80, pH7.4   |
| <b>Shipping</b>              | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.  |
| <b>Stability&amp;Storage</b> | Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.  |
| <b>Reconstitution</b>        | Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. |

## SDS-PAGE image



## Bioactivity image



The ED50 for this effect is 2.0-3.0 ng/ml.

## Background

### Alternative Names

Noggin; NOG

### References

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

**Product Name: GMP Recombinant Human Noggin**  
**Catalog#: PCH90035**



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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.

**Note**

For research use only .