## PRODUCT INFORMATION

## Croyez GMP® Noggin, Human

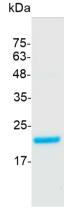
Catalog number	C01176-GMP-100 / C01176-GMP-1000
Package	100 μg / 1 mg
Description	Noggin is a bioactive protein intended for use in cell culture applications. Noggin protein which bind to ligands of the TGF-β family and regulate their activity by inhibiting their access to signaling receptors. Noggin was originally identified as a BMP-4 antagonist whose action is critical for proper formation of the head and other dorsal structures.
Source	Escherichia coli Animal-free reagent and laboratory Manufactured and tested under GMP guideline
Sequence	MQHYLHIRPAPSDNLPLVDLIEHPDPIFDPKEKDLNETLLRSLLGGHYDPGFMAT SPPEDRPGGGGAAGGAEDLAELDQLLRQRPSGAMPSEIKGLEFSEGLAQGK KQRLSKKLRRKLQMWLWSQTFCPVLYAWNDLGSRFWPRYVKVGSCFSKRSC SVPEGMVCKPSKSVHLTVLRWRCQRRGGQRCGWIPIQYPIISECKCSC with polyhistidine tag at the C-terminus
Endotoxin level	<0.1 EU per 1 µg of the protein by the LAL method.
Activity	Measure by its ability to inhibit BMP-4-induced alkaline phosphatase production by ATDC5 cells. The ED $_{50}$ for this effect is <0.05 µg/mL in the presence of 50 ng/mL of recombinant human BMP-4.
Purity	>98% as determined by SDS-PAGE.  Purified by Ni-NTA chromatography.
Formulation	The protein was lyophilized from a solution containing 1X PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile $H_2O$ to a concentration not less than 100 $\mu$ g/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
Storage	Lyophilized protein should be stored at -20°C. This product is stable for one year upon receipt, when handled and stored as instructed. Upon reconstitution, protein aliquots should be stored at -20°C or -80°C. Avoid repeated freeze/thaw cycles.
Note	Please use within one month after protein reconstitution.
Specification	Croyez GMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include:



- Testing and traceability of raw material
- Records of the maintenance and equipment calibration
- Personnel training records
- Batch-to-batch consistency
- Documentation of QA control and process changes
- Manufactured and tested under an ISO 13485:2016 certified quality management system
- Stability monitor of product shelf-life

## Reference

- Krause, C. et al. (2011) Int J Biochem Cell Biol. 43,4: 478-81.
- Que, J. et al. (2006) Differentiation. 74,7: 422-37. 2.



SDS-PAGE analysis of Croyez GMP® Noggin, Human

For Research Use Only. Not for use in diagnostic or therapeutic procedures.