

June 30, 2022

PeptiGrowth Inc.

# PeptiGrowth Inc. is Launching A Novel Synthetic Peptide BMP4,7 inhibitor (Noggin-like peptide)

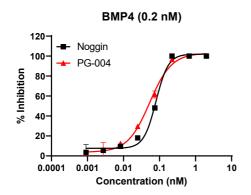
PeptiGrowth Inc. (Headquarters: Chiyoda-ku, Tokyo, President: Jiro Sugimoto) has successfully developed a novel synthetic peptide called "BMP4,7 inhibitor (Noggin-like peptide)" which binds to several Bone Morphogenetic Proteins (BMPs) to inhibit its activity like Noggin. We will be marketing this product from the beginning of July, 2022.

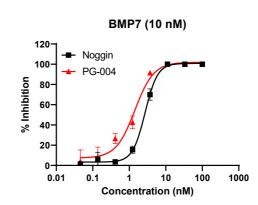
### Development of Synthetic Peptide Growth Factors by PeptiGrowth

Conventional growth factors and cytokines used in the manufacturing of regenerative medicine and cell therapy products are facing various challenges such as lot-to-lot quality variation, potential contamination with biological impurities, low stability, and high cost. PeptiGrowth has been working on the development of a series of synthetic peptides that have the same functions as conventional growth factors and cytokines, and that can address and solve all these challenges. Its peptides are completely chemically synthesized and animal component-free.

#### About BMP4,7 inhibitor (Noggin-like peptide) [Product code: PG-004]

Inhibitory activity against BMP4 and BMP7





We performed a functional comparison test between our Noggin-like peptide and commercially available recombinant Noggin by measuring smad1 phosphorylation. From the results, our Noggin-like peptide showed the inhibitory activity against BMP4 and BMP7 at the same level per molecule compared with recombinant Noggin. We have also confirmed that our Noggin-like peptide exhibits the inhibitory activity against BMP family proteins with high sequence homology to BMP4 and BMP7.



The molecular weight of our Noggin-like peptide is approximately 2.9 kDa, which is approximately 8 times smaller than the MW of recombinant Noggin.

Our Noggin-like peptide is expected to be used to maintain undifferentiation and induce differentiation in the development and manufacture of regenerative medicine and cell therapy for pancreas, lung, intestine, etc., which have been actively researched and developed in recent years, and in the preparation of organoids.

#### Development of Inhibitory Peptides Specific to BMP4 or BMP7

In addition to the newly released Noggin-like peptide, we are also developing peptides that specifically inhibit BMP4 or BMP7. It is expected to be used for analysis of BMP signaling in cell development.

#### Product Overview

Product name: BMP4,7 inhibitor (Noggin-like peptide)

Product Code: PG-004

Product form: Lyophilized

Storage conditions: -20 °C or less

Purity: ≥95% by HPLC

Molecular weight: 2920.15

Size: 5 μg (volume per a glass vial)

\*This product can be provided Animal Component Free (ACF) certificate.

\*This product is for testing and research use only (RUO).

\*There is a possibility that the specification would be changed.

#### Purchase Our Product

If you would like to purchase our products, please contact us at the information below.

For customers who would like to purchase GMP compliant products as well as the above PG products in bulk scale, please contact us using the information provided below.

#### Development of other peptides from PeptiGrowth

PeptiGrowth was established in April 2020 as a joint venture between Mitsubishi Corporation and PeptiDream Inc. with the missions to address various challenges that regenerative medicine and cell therapy industry is facing. Following previously launched three products and BMP4,7 inhibitor (Noggin-like peptide), PeptiGrowth is developing numerous products in parallel and planning to launch a product per a quarter. Details will be updated on its website upon release.



## **Contact Information**

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