

PeptiGrowth Inc.

PeptiGrowth Inc. is Launching a Novel Synthetic Peptide: KGF alternative peptide (FGFR2b agonist)

PeptiGrowth Inc. (Headquarters: Chiyoda-ku, Tokyo, President: Junichiro Ishizuka) has successfully developed a novel synthetic peptide called “KGF alternative- peptide (FGFR2b agonist)” which is functionally equivalent to recombinant keratinocyte growth factor (KGF). This product will be on the market beginning April 2025.

Development of Synthetic Peptide Growth Factors by PeptiGrowth

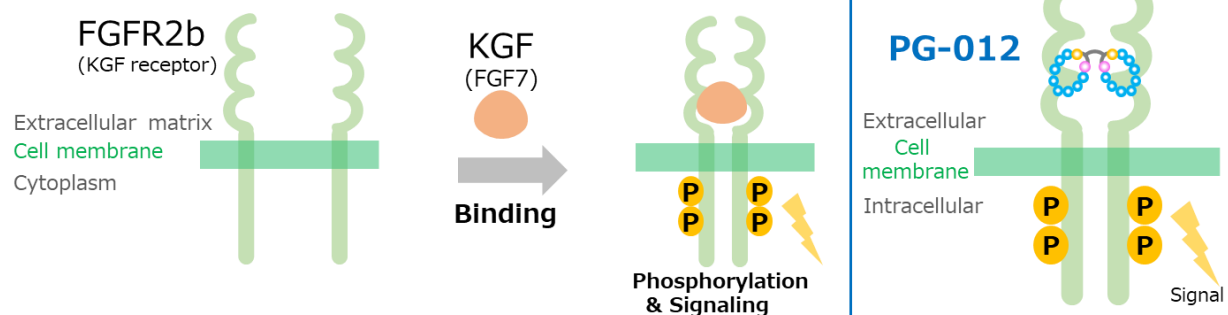
Conventional growth factors and cytokines used in the manufacturing of regenerative medicine and cell therapy products face various quality challenges such as lot-to-lot variation, potential contamination with biological impurities, low stability, and high cost. PeptiGrowth has been working on the development of a series of synthetic peptides that can address these challenges while maintaining equivalent function to the conventional growth factors and cytokines on the market. Our peptides are completely chemically synthesized and animal component-free, enabling xeno-free and chemically defined cell culture media.

About KGF alternative peptide (FGFR2b agonist) [Product code: PG-012]

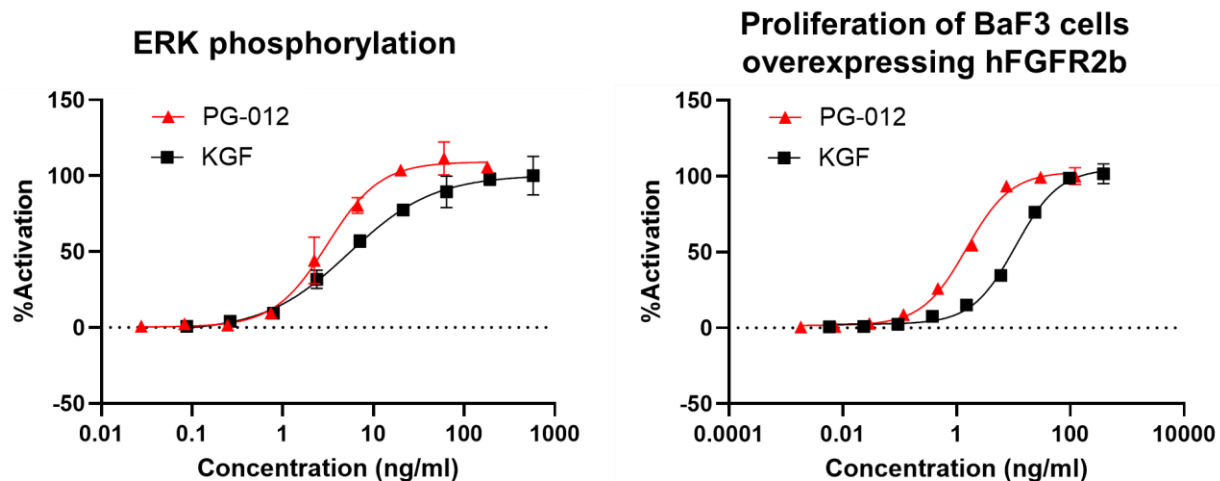
➤ Mechanism of activating FGFR2b by the KGF alternative peptide (PG-012)

PG-012, KGF alternative peptide, is a dimeric peptide composed of cyclic peptides designed to bind specifically to FGFR2b. Like KGF, PG-012 effectively interacts with FGFR2b and exhibits agonistic activity against FGFR2b (see diagram below).

Similar to KGF(Keratinocyte growth factor), PG-012 exerts its biological activity by binding to FGFR2b.



➤ Comparable signal activation activity to recombinant KGF



We conducted a comparative study on the functions of KGF alternative peptide (PG-012) and commercially available recombinant KGF using FGFR2b-overexpressing BaF3 cells. We confirmed that the KGF alternative peptide activates ERK (upper left figure) and exhibits proliferation activity (upper right figure) in a manner similar to recombinant KGF at lower concentrations (ng/mL basis).

We anticipate that the KGF alternative peptide (PG-012) will be applicable in regenerative medicine and cell therapy, particularly in applications such as differentiation and proliferation of epidermal cells and cells derived from the endoderm, such as alveolar epithelial cells, islet cells, and hepatocytes, from pluripotent stem cells.

➤ Product Overview

Product name:	KGF alternative peptide (FGFR2b agonist)
Product code:	PG-012
Product form:	Lyophilized
Storage conditions:	-20°C or less
Purity:	≥95% by HPLC
Molecular weight:	6018.40 (Acetate)
Size:	10 µg, 100 µg, 1 mg (volume per vial)

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

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

*There is a possibility that the specifications can change.

➤ Purchase Our Product

If you would like to purchase our products, please contact us using 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 below.

Development of other peptides from PeptiGrowth

We have developed alternative peptides targeting numerous growth factors and cytokines. To date, we have launched 12 products and plan to launch additional growth-factor alternative peptides targeting PDGF-AA and IL-15 by the end of 2025. Details will be updated on our website. If you are interested, please contact us using the following contact information.

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