

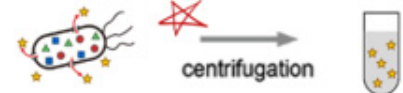
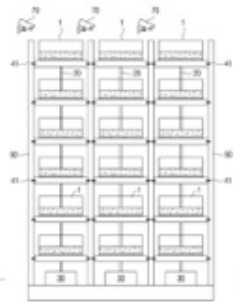
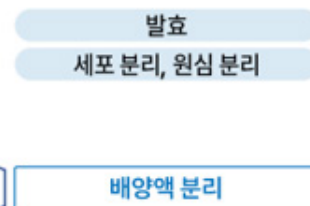
PEPTREE

A new era of peptide production

www.peptree.co.kr

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Redefining Protein Production

OUR **EXPRESSION** SYSTEM**PXP** - **P**eptide **eX**press **P**latform**SIMPLER, FASTER, SCALABLE.****E. coli 방식 8단계****VS****펩트리 PXP 방식 4단계**

PEPTREE produces peptides with PXP, an ultra-high-speed platform for the production of peptides and recombinant proteins based on *Pseudomonas fluorescens*.

PXP utilizes bacterial ABC transporters to directly secrete the target protein into the extracellular culture medium. By minimizing the complex purification steps involved in conventional microbial production methods, PXP enables a simpler and more efficient production process.

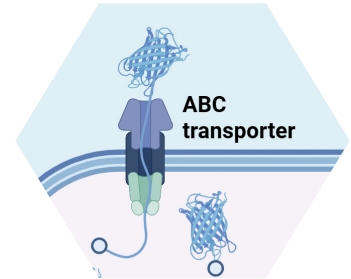
In addition, PXP uses specialized multi-bioreactors. Unlike conventional bioreactors, this setup facilitates easy upscaling of production and enables the simultaneous production of multiple types of peptides.

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Advantages of PXP

SIMPLE.

Simplifies the downstream process by directly secreting peptides extracellularly.

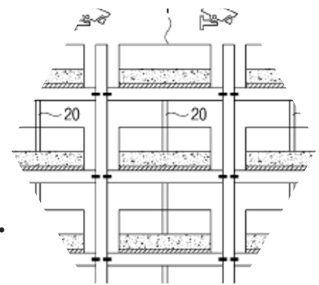


FAST.

Cuts purification steps in half from eight steps to four, and cuts 50L production time from 24 days to just six.

SCALABLE.

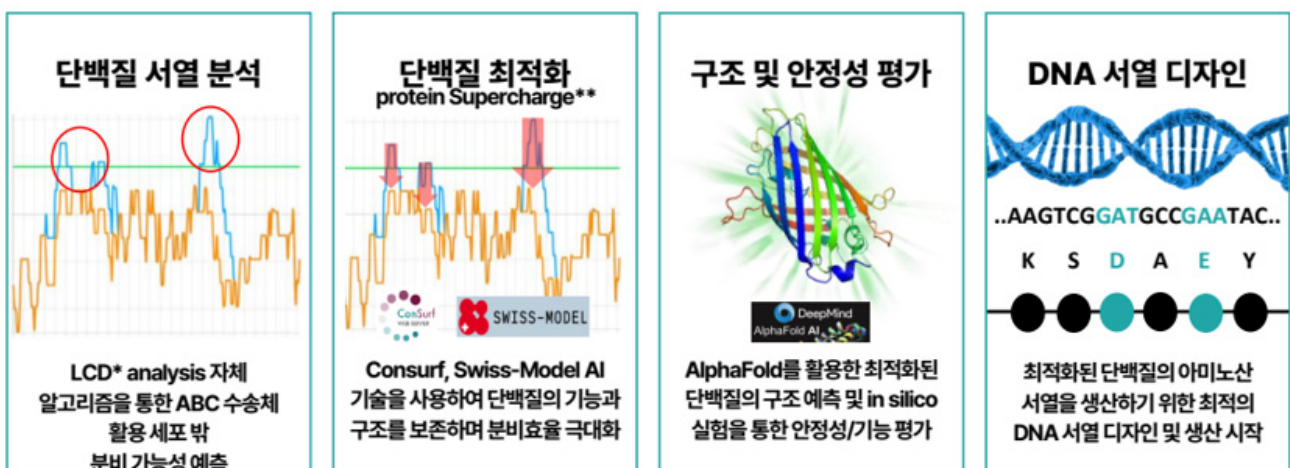
Modular bioreactors allow for simultaneous peptide production and easy expansion of production capacity.



AI + LAB.

Integrating LCD analysis, protein structure prediction, sequence optimization, and DNA design with our production platform, we have built an integrated peptide development system spanning from design to production.

PXP 단백질 생산 극대화 All-in-One 시스템



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PEPTREE Product Line

Our partnership with Allrenu, **REGENIQUE**



Skin and scalp boosters with EGF, FGF1, FGF2, FGF7, FGF10, IGF



Premium skincare: EGF ampoules, V-liners, mask packs

Currently, PEPTREE's main product lines consist of EGF/FGF/IGF growth factor-based skin and hair care products. Growth factors transmit recovery signals to skin cells, enabling fundamental repair of skin damage. They are also excellent for reducing wrinkles and improving elasticity by stimulating the proliferation of fibroblasts that produce collagen and elastin.

In addition, growth factor-based hair boosters stimulate hair follicles to promote thick, long-lasting hair growth. In particular, it regenerates damaged scalp tissue and the scalp skin barrier while reducing inflammatory responses, thereby creating a healthy foundation for more hair growth.

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Pipelines In Development

From cosmetics to **therapeutics**

현재 생산 중

미래 생산예정

화장품과 스킨/헤어 케어 제품을 위한 성장인자

▪ FGF (Fibroblast Growth Factor) family
(FGF1, FGF2, FGF7, FGF10)

▪ EGF (Epidermal Growth Factor)

▪ IGF-1 (Insulin Growth Factor)

▪ BMP7 (Bone Morphogenetic Protein 7)

▪ PDGF (Platelet-Derived Growth Factor)



COSMETICS



SKIN/HAIR



ORGANOIDS



THERAPEUTICS

오가노이드 분화 성장인자 및 GLP-1 Analog

▪ Wnt Family Growth Factors
(Wnt1, Wnt3a, Wnt5a, Wnt10b)

▪ Noggin

▪ HGF (Hepatocyte Growth Factor)

▪ BMP Family Growth Factors

▪ VEGF (Vascular Endothelial Growth Factor)

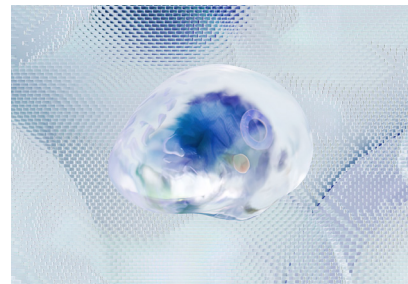
PEPTREE currently produces cosmetic growth factors, including EGF, FGF, and IGF. Building on this foundation, we are expanding our pipeline to include growth factors for organoid cultures and biopharmaceutical proteins.

K-BEAUTY



Beauty products: skincare, hair care, skin boosters, premium ampoules

ORGANOIDS



Supply of peptides for organoid culture (Noggin, HGF, BMP, VEGF etc.)
In development

THERAPEUTICS



Recombinant proteins, GLP-1 analogs etc. biopharmaceutical peptides
In development

DRUG DISCOVERY



Design and production of new drug candidates targeting proteins,
In development



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