PROTAI™

Luminous Vision Peptide







Functions of

PROTAI™

What are the functions of PROTAI™

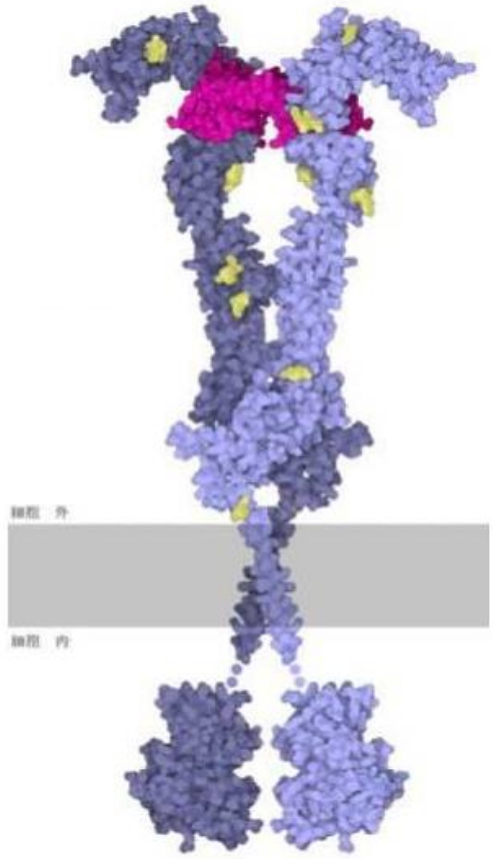
PROTAI™ has been discovered by scientific research to:

- Promote the production of **Vascular Endothelial Growth Factor(VEGF),**
- Enhance microvascular generation, thereby promoting cell repair and activation.
- It also features specific sequence peptides that are **highly targeted, safe, and stable.**

What is VEGF?

What is VEGF?

- VEGF stands for Vascular Endothelial Growth Factor.
- VEGF can induce angiogenesis in vivo and the formation and differentiation of lymphatic vessels in the body.



PROTAI™ Experiments

PROTAITM has been proven through practical experiments to:

- Aid in the repair of **the optic nerve and significantly enhance skin repair effects**.

- For example:
- **Damage caused by exposure to ultraviolet and blue light to the eyeball Leads to pathological changes.**
- Targeted repair for the wound.
- **Help for chronic and acute dry eye syndrome.**



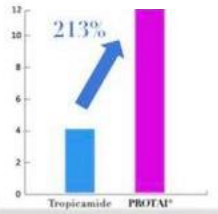
PROTAI®

Experiments and Patents

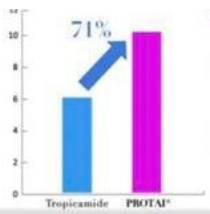
資料僅供內部教育訓練使用不得轉為其它用途使用

Acute Dry Eye Syndrome

Humidity of the Left Eye



Humidity of the Right Eye



Animal Experiments (Rabbits)

- Significant effect on the acute dry eye syndrome method in rabbits.
- Compared to artificial tears Tropicamide, there is an increase of 71.213% in eye moisture.

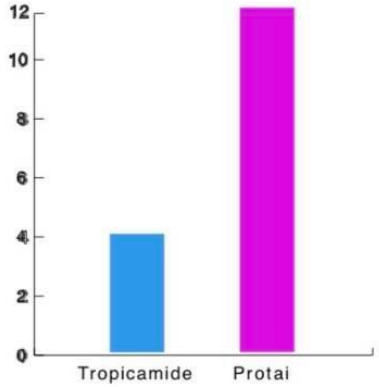


資料僅供內部教育訓練使用不得轉為其它用途使用

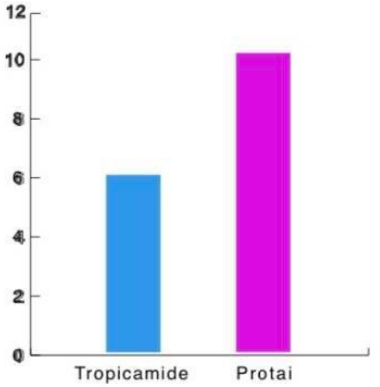


Acute Dry Eye Syndrome

Humidity of the Left Eye



Humidity of the Right Eye



Significant effect on the acute dry eye syndrome method in rabbits.

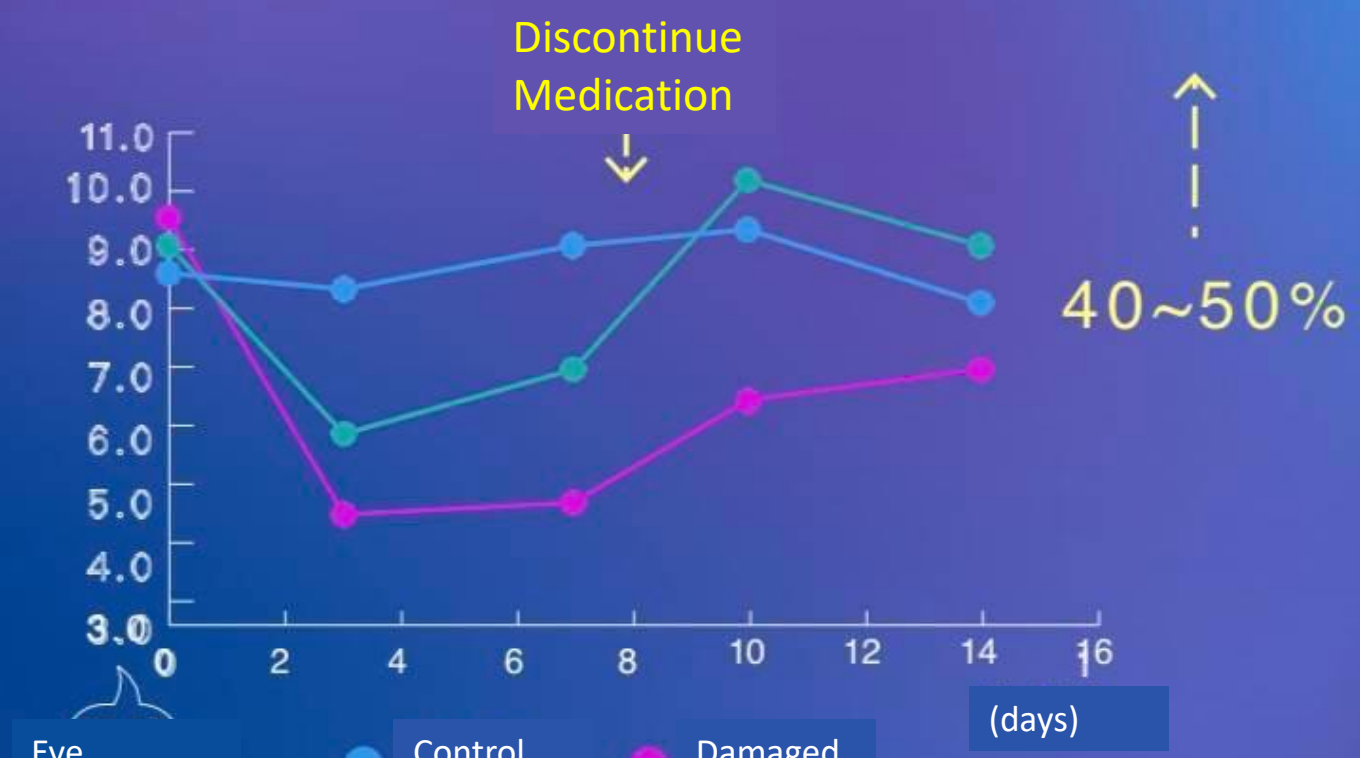
Compared to artificial tears Tropicamide, there is an increase of **71.213%** in eye moisture.

資料僅供內部教育訓練使用不得轉為其它用途使用

資料僅供內部教育訓練使用不得轉為其它用途使用

Chronic Dry Eye Syndrome

長期乾眼症



資料僅供內部教育訓練使用不得轉為其它用途使用

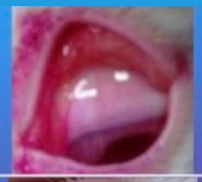
Animal Experiments (Rabbits)



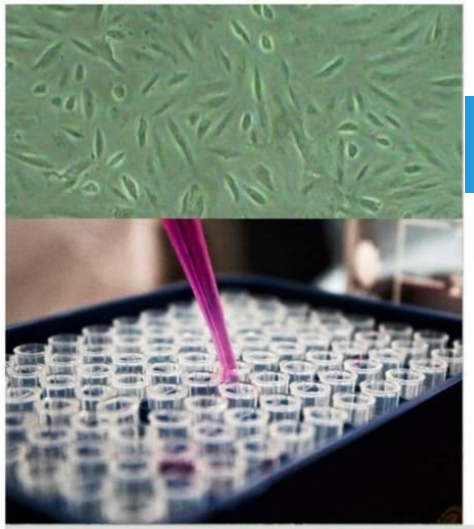
資料僅供內部教育訓練使用不得轉為其它用途使用

Application of Peptide Compositions in Corneal Repair

0.12N HCl 鹽酸

Date/Group	Control Group	Damaged Group	Damaged + Eyechoicy Group
After 3 days			
After 7 days			

資料僅供內部教育訓練使用不得轉為其它用途使用

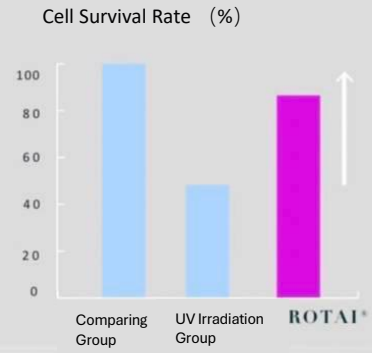


ARPE-19 Retinal Pigment Epithelium Cell UV Light Exposure Experiment

In a 24-well plate containing ARPE-19 cells, add **PROTAI™** and culture for 24 hours. Then, expose to 100 milli-joules (mJ) of UV light. After placing in an incubator for 30 minutes, aspirate the supernatant and measure cell viability using the MTT assay.

資料僅供內部教育訓練使用不得轉為其它用途使用

Experimental Results



Compared to the UV irradiation group with the addition of **PROTAI™** the ARPE-29 cell survival rate increased by 49%.

資料僅供內部教育訓練使用不得轉為其它用途使用

PROTAI® Patent Overview

Location	Certificate No.	Patent Name
United States	ASB0004US	Peptides and Their Compositions for Promoting Eye Health
Taiwan	1674124	Peptides and Their Compositions for Promoting Eye Health
Taiwan	1698249	Application of Short-chain Peptide Compositions for Eye Protection Against Light Damage
Taiwan	1698250	Application of Short-chain Peptide Compositions for the Prevention or Treatment of Dry Eye Syndrome
China	ZL 2017 1 1326809.3	The Use of Eye-protective Peptides and Their Applications
China	ZL 2019 1 0114691.0	Application of Short-chain Peptide Compositions for Eye Protection Against Light Damage
China	ZL 2019 1 0114655.4	Application of Short-chain Peptide Compositions for the Prevention or Treatment of Dry Eye Syndrome
Taiwan	1693941	Short-chain Peptide Compositions and Their Use in Skin Protection
China	ZL 2019 1 0114492.X	Short-chain Peptide Compositions and Their Use in Skin Protection

資料僅供內部教育訓練使用不得轉為其它用途使用