

# A safer topical alternative to Botulinum Toxin

Effective in just 1 week

A widely known solution for 1st to appear wrinkles

The first hexapeptide that is a replica of the N-terminal end of SNAP-25, thereby competing with it for a position in the SNARE complex. **Argireline® peptide** is an alternative to Botulinum Toxin, topically targeting the same wrinkle-formation mechanism in a very different way.

**COMMERCIAL SOLUTION:** Transparent solution containing 0.05% Acetyl Hexapeptide-8.

INCI: Water (Aqua), Acetyl Hexapeptide-8, Caprylyl Glycol.

**USE LEVEL:** 2-10% **SOLUBILITY:** Water soluble.

SUSTAINABILITY:



Naturality according to ISO16128 99.5% natural origin content

You know the destination
WE'LL HELP YOU REACH IT SUSTAINABLY

#### **SCIENCE**

One of the most striking signs of aging is the increase of wrinkles on the face. This can occur naturally over time and is identified by certain biochemical, histological, and physiological changes that are amplified by environmental exposure and other secondary factors such as the pull of gravity or repeated facial movements caused by the contraction of muscles of facial expression. Muscles are contracted when the vesicle in the motor neuron releases a neurotransmitter.

Argireline® peptide mimics the N-terminal end of SNAP-25 and it competes with the natural protein for a position in the SNARE complex. If the SNARE complex is slightly destabilized, the vesicle cannot release neurotransmitters efficiently and therefore muscle contraction is attenuated, preventing the formation of lines and wrinkles.







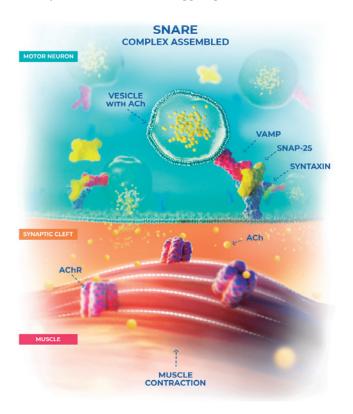




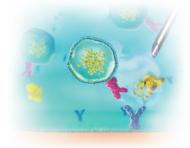
# IN VITRO EFFICACY

## • MUSCLE CONTRACTION

Assembly of the SNARE complex enables fusion of vesicles and the release of neurotransmitter (neuronal exocytosis). The released neurotransmitter acetylcholine (ACh) binds the receptor AChR in the muscle, triggering contraction.

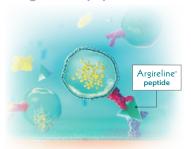


#### BOTULINUM TOXIN A



Cleaves the protein SNAP-25, preventing assembly of the SNARE complex, to block ACh release and paralize the muscle contraction.

## Argireline® peptide



Competes with SNAP-25, slightly destabilizing the SNARE complex, to reduce neurotransmitter release and attenuate muscle contraction.

Argireline® peptide destabilizes the SNARE complex

Inhibition of neurotransmitter release

A reduction of up to 32.0% in glutamate release.

# IN VIVO EFFICACY

# **EFFECT ON WRINKLE VOLUME AND LENGTH**

22 female volunteers applied a cream containing 2% **Argireline® peptide solution C** on half of the face, and a placebo cream on the other half, twice a day for 7 days. Wrinkle volume and length were evaluated.



## **ROUGHNESS DIMINUTION IN WRINKLES**

18 female volunteers applied a cream containing 5% **Argireline® peptide solution C** to the face, twice a day. After 28 days of treatment, arithmetic average roughness (Ra) was evaluated.

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Decreased wrinkle volume and length just after 1 week

Volume was diminished by 20.6% and length by 15.9% (statistically significant).

Reduction of 20.4% in roughness after 28 days (statistically significant).



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