Special chemicals

Neuroactive peptide that targets expression lines by helping relax facial microcontractions, visibly smoothing wrinkles and fine lines

# SCH PeptCare™ AcO3

Innovative ingredients

# Main Function

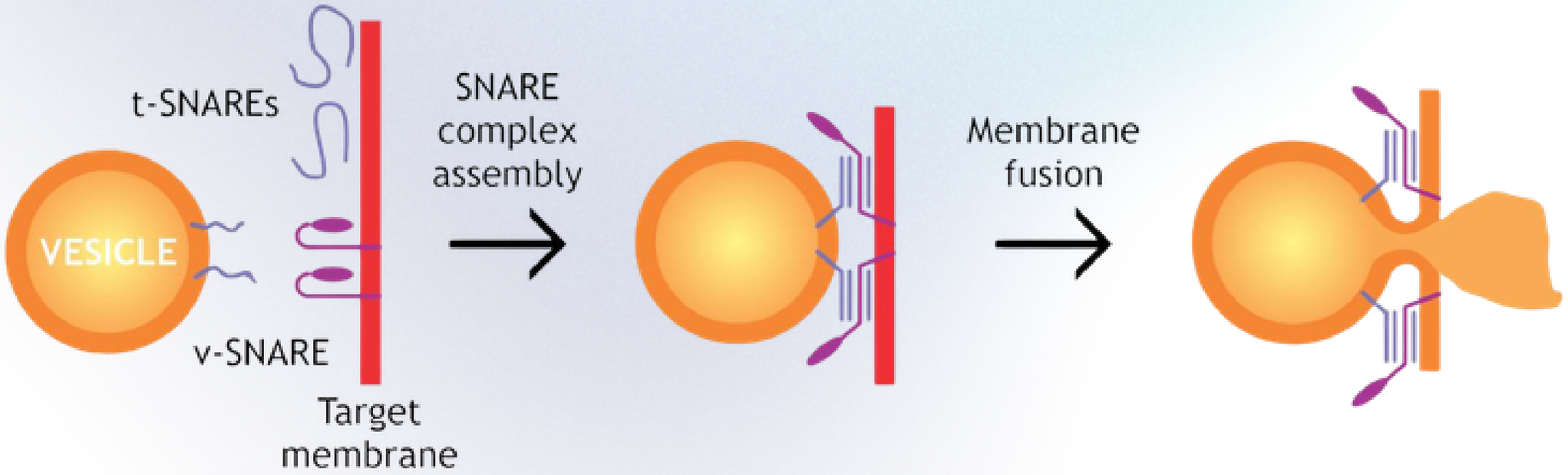
**SCH PeptCare™ AcO3** is a neuroactive peptide designed to help reduce the appearance of expression lines and wrinkles by **modulating neurotransmission-related muscle contraction**. Repetitive facial movements can intensify visible skin creasing over time, especially in areas such as crow's feet and forehead lines.

By helping relax facial microcontractions involved in repeated expressions, it supports a **smoother skin surface and a more rested appearance**. This mechanism makes it especially suitable for anti-wrinkle concepts targeting dynamic lines and early visible signs of aging.

Special Chemicals

# Acetyl Octapeptide-3

Neuroactive peptide that competes for a position in the SNARE complex avoiding SNARE complex assembly: an essential requisite for acetylcholine release and muscle contraction triggering. The release of acetyl choline is the key for muscle contraction and wrinkle generation.



# Expression lines: the challenge

Dynamic wrinkle formation is closely linked to **repeated facial microcontractions** and the progressive marking of the skin surface over time.

Daily facial expressions and intrinsic aging can gradually intensify the appearance of crow's feet, forehead furrows and other expression lines.

A targeted neuroactive approach to smooth expression lines is increasingly demanded in modern anti-aging skincare.

# Expression line control & visible anti-wrinkle: the opportunity

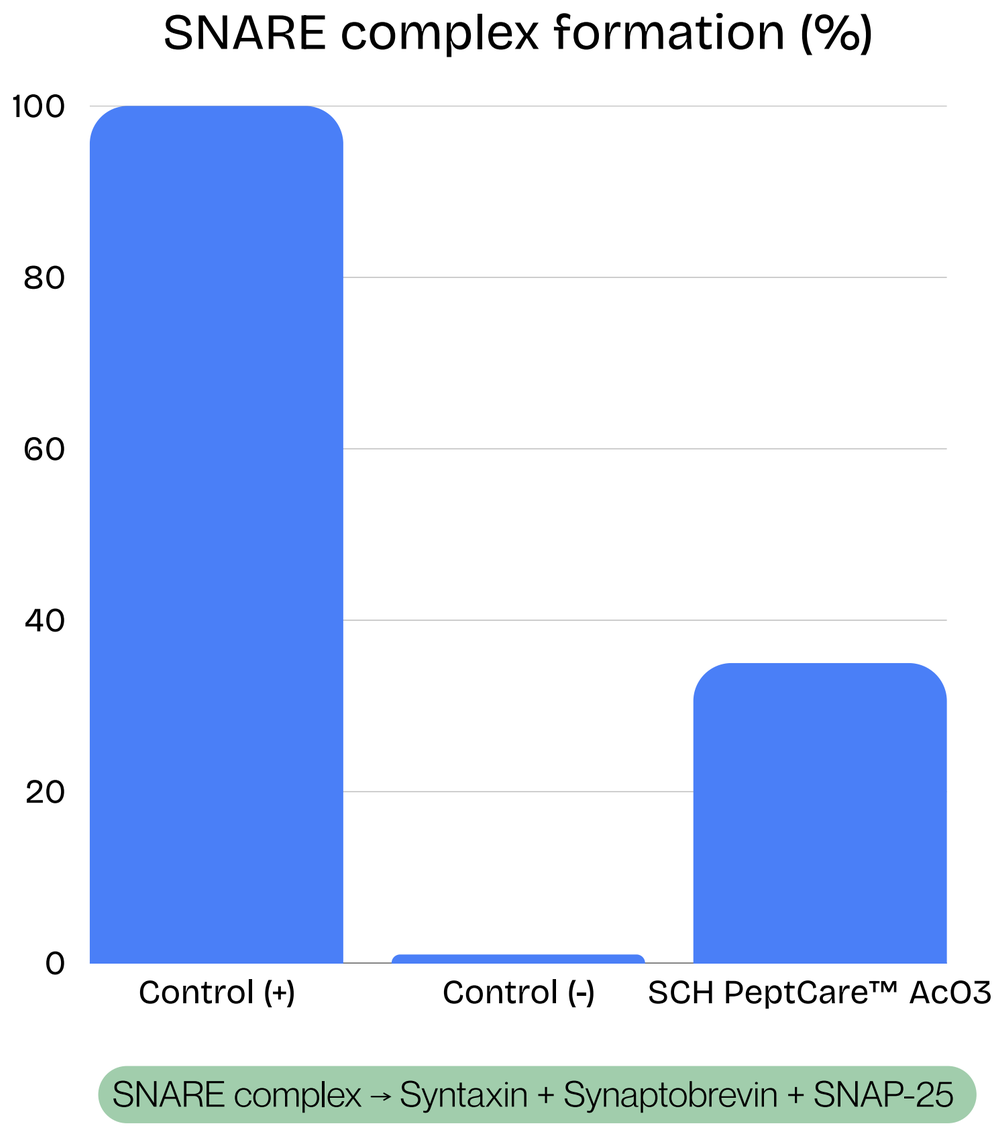
Not all wrinkles are driven by the same mechanism. While some are mainly associated with collagen loss and skin aging, expression lines are strongly influenced by **repeated facial muscle movement**. This makes them a distinct target within anti-wrinkle skincare

**Acetyl octapeptide-3** is a neuroactive peptide positioned to address this specific wrinkle pathway by helping reduce the visible impact of repeated facial microcontractions. It is therefore a relevant option for formulas focused on expression lines, smoother-looking skin and a more relaxed facial appearance

# Efficacy Studies

The significant modulation is a clear indication of the potent anti-wrinkle activity of SCH PeptCare™ AcO3.

**Inhibition of SNARE complex**

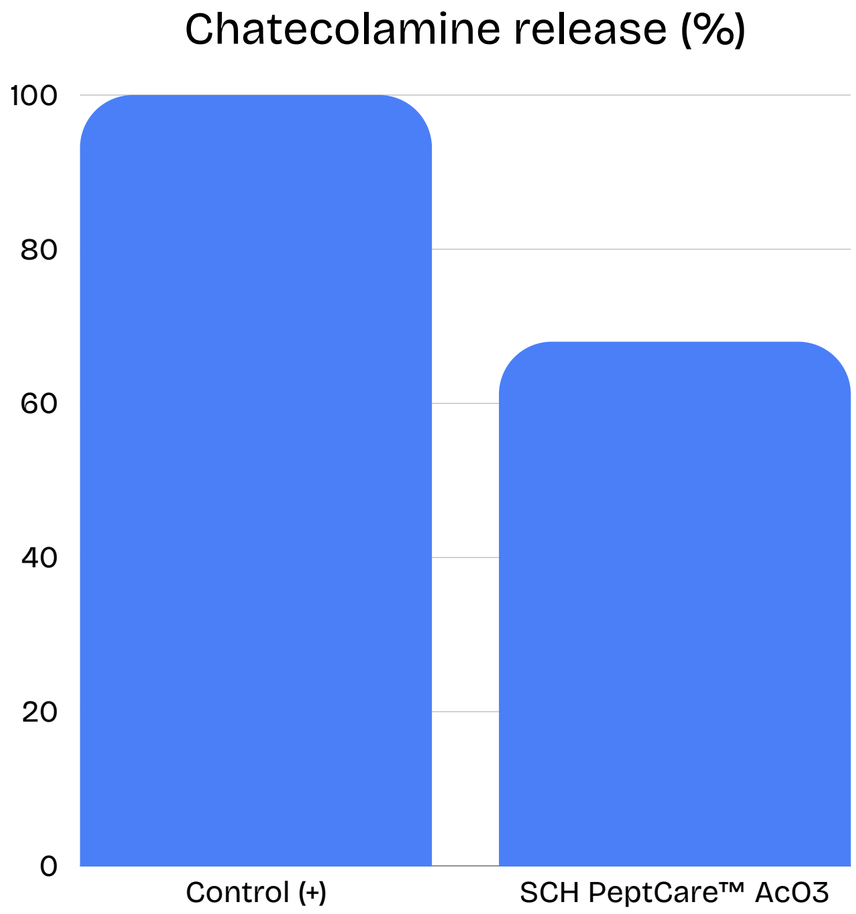



*This study assessed how SCH PeptCare™ AcO3 (100µM) disrupts SNARE complex formation. The peptide, patterned after the SNAP-25 domain, was evaluated for its capacity to prevent syntaxin and synaptobrevin assembly, with native SNAP-25 serving as positive control.*

# Efficacy Studies

Chromaffin cells are used as models to study neural properties and processes, for instance, exocytosis and catecholamines release is a measure of acetylcholine secretion from nerve cells.

**Modulation of catecholamine release**

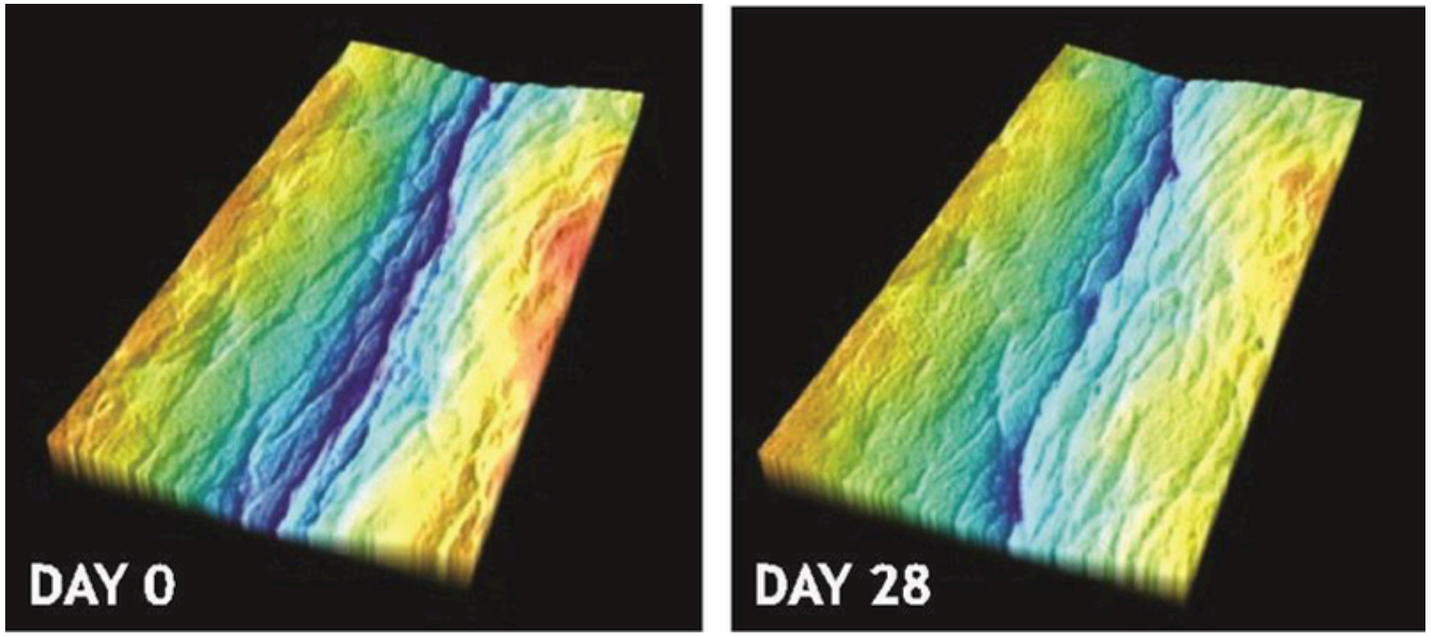



*In this neural model, chromaffin cells incubated with tritiated catecholamines and 100 µM SCH PeptCare™ AcO3 exhibited significant reduction in neurotransmitter release. This demonstrates the peptide's capacity to interfere with acetylcholine secretion pathways, directly supporting its anti-wrinkle mechanism.*

# In vivo Test

**Analysis of imprints performed by confocal profilometry**

*Representative images of skin topography obtained by confocal profilometry to assess the effectiveness of a cream containing 10% SCH PeptCare™ AcO3 applied twice daily for 28 days. Silicone imprints were obtained from 20 volunteers in the periorbital area.*



# Technical specifications

**Available in powder and solution form**

**Recommended dosage:** 3 - 5% (1g/L of peptide in solution)

**Regulatory status:**

Europe → ALLOWED

China → ALLOWED