



Technical Data Sheet

Siped® AH-8

Key Features

Siped® AH-8, a solution of acetyl hexapeptide-8, can reduce the depth of the wrinkles caused by the contraction of the muscles of facial expression, especially in the forehead and around the eyes. Siped® AH-8 is a safer, cheaper, and milder alternative to Botulinum Toxin.

INCI Glycerin - Water (Aqua) - Butylene Glycol - Acetyl Hexapeptide-8

CAS 616204-22-9

Sequence

Ac-Glu-Glu-Met-Gln-Arg-Arg-NH₂

Properties and benefits

1 Siped® AH-8 reduces the depth of the wrinkles caused by the contraction of the muscles of facial expression, especially in the forehead and around the eyes. Siped® AH-8 is a safer, cheaper, and milder alternative to Botulinum Toxin.

2 Muscles are contracted when they receive neurotransmitter that travels within a vesicle. The SNARE (SNAP receptor) complex is essential for this neurotransmitter release at the synapsis. It is a ternary complex formed by the proteins VAMP, Syntaxin and SNAP-25. This complex is like a cellular hook which captures vesicles and fuses them with the membrane for the release of neurotransmitter.

3 Siped® AH-8 is a mimic of the N-terminal end of SNAP-25 which competes with SNAP-25 for a position in the SNARE complex, thereby modulating its formation. If the SNARE complex is slightly destabilized, the vesicle cannot dock and release neurotransmitters efficiently and therefore muscle contraction is attenuated, preventing the formation of lines and wrinkles.

Applications

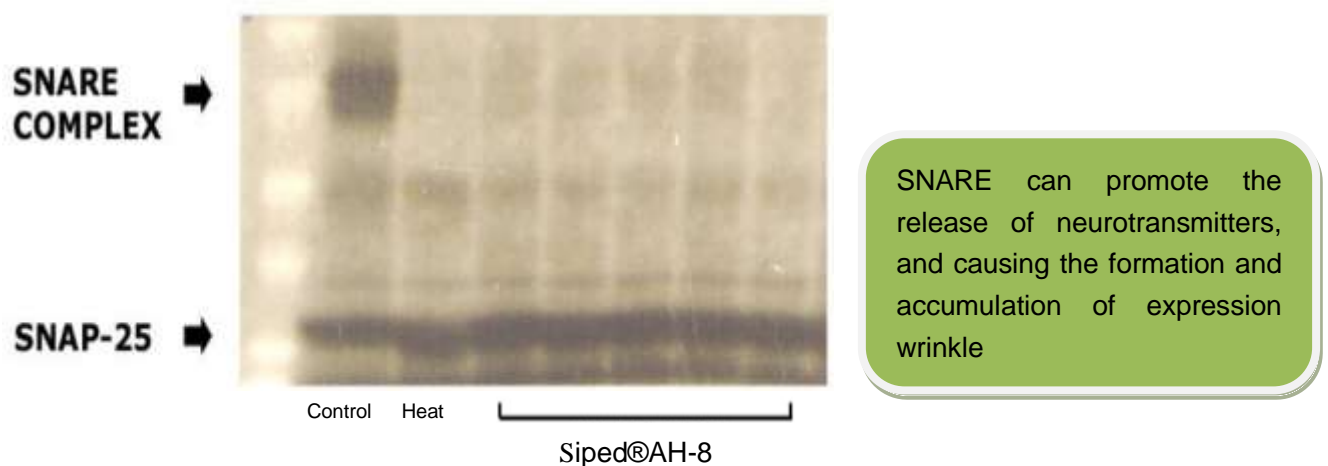
Siped® AH-8 is particularly suitable for anti-wrinkle maintenance of facial muscle concentration (around the eyes, forehead, face, etc.), reducing the depth of wrinkles.

Specifications

| | |
|---------------------------------|----------------------|
| Appearance | Transparent solution |
| Odour | Characteristic |
| HPLC+MS | Conform |
| PH | 6.0-7.0 |
| Content of acetyl hexapeptide-8 | ≥550 ppm |
| Total Plate Count (cfu/gm) | ≤100 |

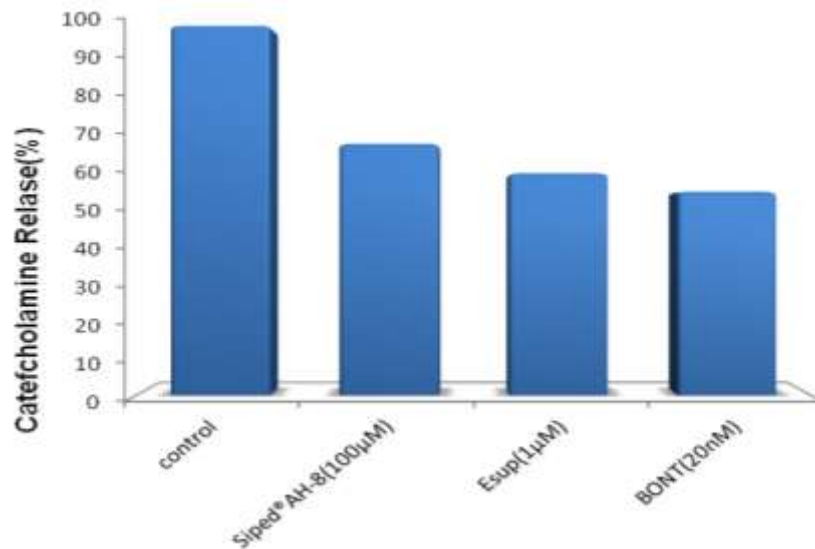
In vitro tests

1 Inhibition on the formation of SNARE complex: SNARE complex consists of VAMP, Syntaxin, SNAP-2. The experiments were performed to determine the ability of Siped®AH-8 to compete with SNAP-25 for the formation of SNARE complexes with syntaxin and synaptobrevin. The content of SNARE complex was determined by electrophoresis.



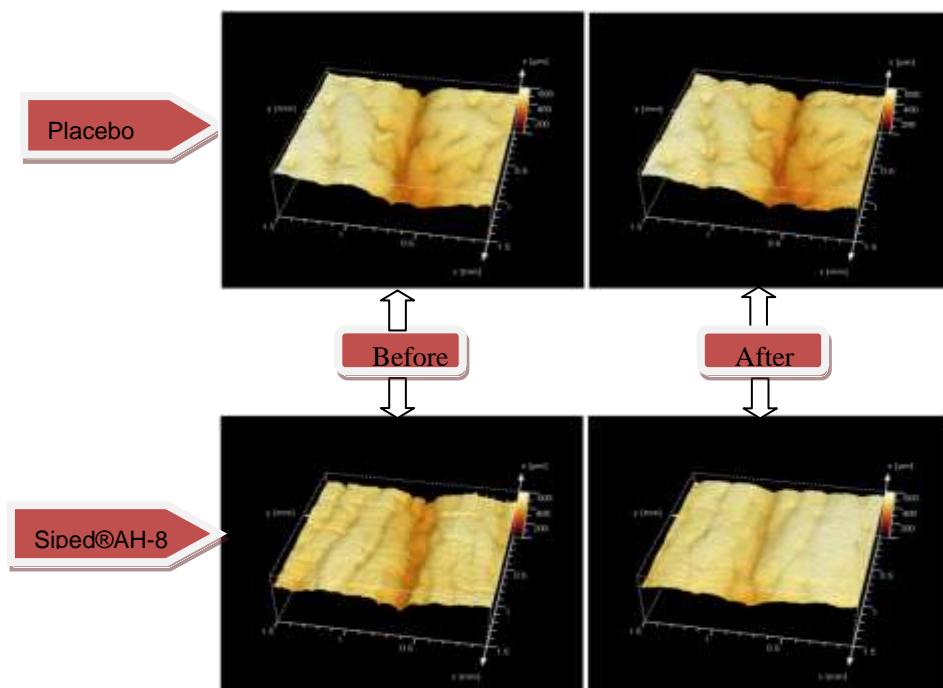
Conclusion: SNARE complexes can be destroyed by heating and Siped®AH-8 is effective in inhibiting the formation of SNARE complexes.

2 Effect on the release of catecholamines in chromaffin cells: Catecholamines are related to the muscle contractions, of which effect is similar to neurotransmitter acetylcholine. The inhibitory effect of catecholamine is measured by monitoring neurotransmitter adrenaline and Noradrenaline, which are indicator of the effective anti-wrinkle activity of the Siped®AH-8.



In vivo tests

1 Clinical anti-wrinkle test: 20 volunteers painted emulsion containing 10% Siped®AH-8 on the skin around eyes for 30 days. The changes of skin texture were observed by silica gel blotting.



Conclusion: Compared to placebo, the emulsion containing 10% Siped®AH-8 significantly improve the skin around eyes include the amount, length and depth of wrinkles.

Recommended use level

3 to 10%

Formulation Tips

- 1 Incorporated in cosmetic formulations at room temperature.
- 2 Can be compatible with carbomer

Package

5Kg/ tin

Storage

Siped[®]AH-8 remains stable for 2 years when stored at room temperature and sealed.

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