

Argireline, a hexapeptide, patented by Lipotec S.A. is one of the many new revolutionary anti-aging skin care discoveries. This peptide, Argireline, has been demonstrated to display wrinkle reducing properties similar to BOTOX injections. However, Argireline is a topical solution, which can be used safely as an anti aging ingredient as a 10% Argireline solution.

BOTOX[®], an attenuated derivative of the deadly Botulinum Toxin, works by actually paralyzing muscles, preventing them from contracting. This effect generally lasts from a few weeks to a couple of months. Continual injections are required to maintain this state of muscle paralyzation. Conversely, the anti aging ingredient Argireline is administered topically, in a non-invasive, injection free manner. The anti wrinkle ingredient Argireline is usually combined with other anti-aging ingredients for a more complete anti aging beneficial effect.

Wrinkles form due to the effect of gravity over time, environmental damage, frequent and continued facial pressures such as during sleeping, and because of repeated facial movements or expressions. Regardless of the skin aging cause, the basic molecular changes leading to skin aging and wrinkles are consistent time, pressure, or movement all lead to a breakdown of collagen, degradation of elastin polypeptides, and a breakdown in the lipidic matrix of the skin. Argireline significantly avoids and/or inhibits this skin aging by modulating the formation of the SNARE complex and the release of catecholamines.

The SNARE complex is a complex and delicate sequence of neurotransmitter release and absorption which ultimately leads to muscle contraction. Argireline safely interferes with this process by mimicking one of the neurotransmitters. In essence, it binds with and blocks the absorption of actual neurotransmitters, effectively inhibiting muscle contraction. In this regard, Argireline produces a very similar effect to BOTOX in that both anti wrinkle treatments ultimately slow or inhibit the contraction of muscles. However, Argireline and other short synthetic peptides have been shown to inhibit catecholamines (noradrenaline and adrenaline) which also induce wrinkle formation. Thus Argireline has an added anti wrinkle benefit beyond merely preventing muscle contraction.

Argireline's anti wrinkle effect was clinically proven through manufacturer "in vitro" and independent "in vivo" clinical studies. Silicone impressions of female volunteers were taken pre-test and after 30-days of twice-a-day application of a 10% Argireline solution. Analysis of these silicone imprints were performed by confocal laser scanning microscopy. It was observed that the severity of wrinkles around the eyes decreased up to 17% after 15 days of treatment and up to 27% after 30 days of treatment, substantiating the proposed biochemical mechanism hypothesis.

