

SS-31

SS-31, also known as Elamipretide, is a mitochondria-targeting peptide that has been developed to protect and repair mitochondria by reducing oxidative stress and improving energy production. It binds to cardiolipin, a lipid unique to the inner mitochondrial membrane, and helps stabilize mitochondrial membranes. By doing so, SS-31 enhances mitochondrial function, improves ATP production, and protects against cellular damage caused by oxidative stress. SS-31 is particularly beneficial in conditions where mitochondrial dysfunction is central, such as neurodegenerative diseases, cardiovascular diseases, and muscle disorders.

Mitochondrial Dysfunction:

Enhances ATP production, reduces oxidative damage, improves mitochondrial efficiency, and slows disease progression.

Cardiovascular Health:

Improves cardiac energy production, reduces ischemic damage, and enhances recovery after heart attacks.

Ischemia-Reperfusion Injury:

Reduces tissue damage, promotes recovery, and improves long-term outcomes following ischemic events.

Muscle Health and Sarcopenia:

Improves muscle strength, endurance, and reduces muscle fatigue.

Neuroprotection:

Reduces neuronal oxidative stress, improves cognitive function, and slows progression in conditions like Alzheimer's Parkinson's.

