



LKT Laboratories, Inc.

[Pro9]-Substance P

Phone: 888-558-5227

651-644-8424

Fax: 888-558-7329

Email: info@lktlabs.com

Product Information

Product ID S8011

CAS No. 104486-69-3

Chemical Name

H-Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Pro-Leu-Met-NH₂

Synonym

Formula C60H102N12O12S

Formula Wt. 1387.73

Melting Point

Purity ≥95%

Solubility Soluble in water, acid.

Bulk quantities available upon request

Product ID	Size
S8011	0.5 mg
S8011	1 mg
S8011	2.5 mg

Store Temp -20° C

Ship Temp Ambient

Description Substance P (SP) is an endogenous tachykinin neuropeptide that is involved in inflammatory, pain, and stress signaling; it exhibits neuroprotective, cognition enhancing, and gastrointestinal motility modulating activities. SP exhibits neuroprotective activity by decreasing expression of Kv1.4 K⁺ channels in transgenic animal models of Alzheimer's disease and improving cognitive performance in the Morris water maze task. SP is the natural ligand for the neurokinin-1 (NK1) receptor. In various animal models, SP modulates opioid signaling, induces gastric mucosal protection, and inhibits retinal apoptosis. SP also prevents hyperoxia-induced lung damage, decreasing levels of malondialdehyde and increasing levels of superoxide dismutase (SOD); this activity may be regulated through Shh signaling. In melanoma cells, SP decreases levels of tyrosinase and melanin, inhibiting melanogenesis. In other cellular models, SP increases the viability and proliferation of osteoblasts and promotes gap junction intracellular communication.

References

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.