Substance P

Neuropeptide

Neuropeptide inducing Ca²⁺ mobilization. Activates G₁-Proteins directly. Induces superoxide production in neutrophils.

Substance P (SP) was first discovered in 1931 by von Euler and Gaddum and is the best characterized member of the neurokinins. This class of peptide neurotransmitters includes neurokinin A (NK-A) and B (NK-B), and are characterized by the common C-terminal sequence Phe-X-Gly-Leu-Met-NH2. The receptors for SP, NK-A and NK-B, designated NK1, NK2 and NK3 respectively, are members of the G protein-coupled receptor superfamily. All three receptors have been shown to stimulate inositol phospholipid hydrolysis. SP is involved in pain, smooth muscle contraction, secretion from exocrine and endocrine glands, inflammatory response including vasodilation, plasma extravasation and mobilization of immune system cells.

Citations: 5

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Ordering Information

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ALX-167-003-M001	1mg
ALX-167-003-M005	5mg

Manuals, SDS & CofA

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Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended.

Long Term Storage -20°C

Shipping Ambient Temperature

Regulatory Status RUO - Research Use Only

Product Details

CAS 33507-63-0

Formula $C_{63}H_{98}N_{18}O_{13}S$

Formulation Lyophilized

MI 14: 8863

MW 1347.6

Purity ≥97% (HPLC)

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

Solubility Soluble in DMSO or water.