

Staurosporine, Free Base

Catalog #: 27002

Lot #: 111118

Size: 1 mg

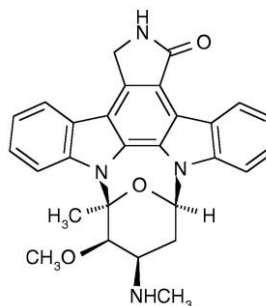
Structure:

CAS Registry #: 62996-74-1

Purity: ≥ 95%

Chemical Formula: C₂₈H₂₆N₄O₃

Molecular Weight: 466.53



Description: Staurosporine is a potent inhibitor of many kinases including protein kinase C, protein kinase A, and protein kinase G. It also induces apoptosis in human neuroblastoma cell lines and chick embryonic neurons.

Appearance: Light yellow crystalline solid or solid film at bottom of vial.

Solubility: Soluble in DMSO or ethanol; insoluble in water.

Biological Activity: Staurosporine, a microbial alkaloid with antifungal activity, has been shown to inhibit a variety of kinases including PKA ($K_i=7.0$ nM), PKG ($K_i=8.5$ nM), MLCK ($K_i=1.3$ nM), PKC ($K_i=0.7$ nM), CaMK ($IC_{50}=20$ nM), CAMKII ($K_i=20$ nM), tyrosine kinases ($IC_{50}=70$ nM) and phosphorylase kinase ($IC_{50}=0.5$ nM).

Storage/Stability: Store at or below -20°C .

Quality Control: The purity was determined by HPLC.

References:

1. Matsumoto, H., *et al. Biochem. Biophys. Res. Commun.* **128**: 105-109 (1989).
2. Tamaoki, T., *et al. Biochem. Biophys. Res. Commun.* **135**: 397-402 (1986).
3. Boix, J., *et al. Neuropharmacology* **36**: 811-821 (1997).
4. Wiesner, D.A. and Dawson, G. *J. Neurochem.* **66**: 1418 – 1425 (1996).