

PRODUCT DATA SHEET

Product: Staurosporine

Cat. No.: AP-002 (1 mg)

CH₃OH CH₃ONH NH

Chemical Composition:

 $C_{28}H_{26}O_3$

Molecular Weight:

466

Description:

Staurosporine, isolated from *Streptomyces* sp., is a potent protein kinase inhibitor that inhibits the catalytic domain of protein kinases, including protein kinase C. Staurosporine can cross cell membranes in 0.5 to 2.0 hours and has been shown to function in both plant and mammalian systems.

Format:

Provided in lyophilized form. Reconstitute with 1 mL DMSO or DMF. A working solution is prepared by dilution with ethanol or methanol just before use.

Storage and Stability:

Store at −20 °C in the dark. Lyophilized form is stable for many years. Stability of stock solution (DMSO) depends on solvent quality but usually 6 months to 1 year when stored properly. Working Solution (ethanol) is stable for 6 months to 1 year when stored properly.

Inhibitory Data:

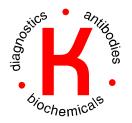
| | <u>Ki (μΜ)</u> | <u>IC₅₀ (μM)</u> |
|----------------------------|----------------|-----------------------------|
| Protein Kinase C | 0.0007 | 0.00272 |
| cAMP-dep. Protein Kinase | 0.0070 | 0.00542 |
| cGMP-dep. Protein Kinase | 0.0085 | 0.008531 |
| Myosin Light Chain Kinase | 0.0013 | 0.001924 |
| p60v-src Protein Tyrosine | | 0.00645 |
| Kinase | | |
| CaM-Kinase II | | 0.020023 |
| Cardiolipin- and Protease- | | 0.03026 |
| activated Protein Kinase | | |

Page 1 of 3

| Protein Kinase C subtypes | IC ₅₀ (mM) |
|---------------------------|-----------------------|
| Protein Kinase C alpha | 0.00330 |
| Protein Kinase C beta-1 | 0.00930 |
| Protein Kinase C beta-2 | 0.00330 |
| Protein Kinase C gamma | 0.00430 |
| Protein Kinase C delta | 0.02730 |
| Protein Kinase C epsilon | 0.04930 |
| Protein Kinase C zeta | 1.29030 |
| Protein Kinase C eta | 0.01030 |

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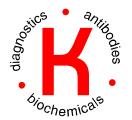


PRODUCT DATA SHEET

Cat. No.: AP-002 Page 2 of 3

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PRODUCT DATA SHEET

cytosine-induced

Cat. No.: AP-002

87-99.

Arabinofuranosyl]

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Page 3 of 3

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Limitations:

For in vitro research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.