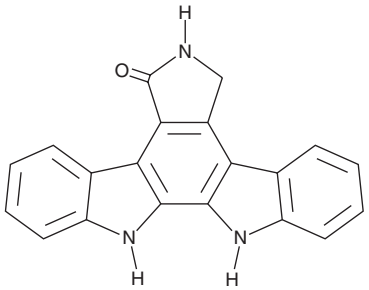
PRODUCT INFORMATION

K252c

Item No. 13514

CAS Registry No.:	85753-43-1
Formal Name:	6,7,12,13-tetrahydro-5H-indolo[2,3-a] pyrrolo[3,4-c]carbazol-5-one
Synonyms:	SD 1825, Staurosporine aglycone
MF:	$C_{20}H_{13}N_3O$
FW:	311.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 233, 290, 333, 359 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

K252c is supplied as a crystalline solid. A stock solution may be made by dissolving the K252c in the solvent of choice, which should be purged with an inert gas. K252c is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of K252c in these solvents is approximately 25 and 0.5 mg/ml, respectively. K252c is also slightly soluble in ethanol.

K252c is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, K252c should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. K252c has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

K252c is a cell-permeable PKC inhibitor (IC_{50}s = 2.45 and 25.7 µM for PKC and PKA, respectively).[1] It induces apoptosis in human chronic myelogenous leukemia cancer cells.[2] In human foreskin fibroblast cells, it reduces focus formation induced by human cytomegalovirus (HCMV) strains sensitive and resistant to ganciclovir (Item No. 13853) with IC_{50}s of 0.32 and 0.17 µM for HCMV A6245 and HCMV-6, respectively.[3] It also inhibits the non-kinase enzymes β-lactamase, chymotrypsin, and malate dehydrogenase with IC_{50}s of 8, 10, and 8 µM, suggesting less kinase-selectivity than was originally described.[4]

References

1. Pereira, E.R., Belin, L., Sancelme, M., *et al*. Structure-activity relationships in a series of substituted indolocarbazoles: Topoisomerase I and protein kinase C inhibition and antitumoral and antimicrobial properties. *J. Med. Chem.* **39(22)**, 4471-4477 (1996).
2. Liu, R., Zhu, T., Li, D., *et al*. Two indolocarbazole alkaloids with apoptosis activity from a marine-derived actinomycete Z2039-2. *Arch. Pharm. Res.* **30(3)**, 270-274 (2007).
3. Zimmermann, A., Wilts, H., Lenhardt, M., *et al*. Indolocarbazoles exhibit strong antiviral activity against human cytomegalovirus and are potent inhibitors of the pUL97 protein kinase. *Antiviral Res.* **48(1)**, 49-60 (2000).
4. McGovern, S.L. and Shoichet, B.K. Kinase inhibitors: Not just for kinases anymore. *J. Med. Chem.* **46**, 1478-1483 (2003).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM