PRODUCT INFORMATION



Gö 6976

Item No. 13310

CAS Registry No.: 136194-77-9

Formal Name: 5,6,7,13-tetrahydro-13-methyl-5-oxo-12H-

indolo[2,3-a]pyrrolo[3,4-c]carbazole-12-

propanenitrile

Synonym: PD 406976 MF: $C_{24}H_{18}N_4O$ FW: 378.4 **Purity:**

UV/Vis.: λ_{max} : 245, 290, 332, 367 nm

Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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



Gö 6976 is supplied as a crystalline solid. A stock solution may be made by dissolving the Gö 6976 in the solvent of choice, which should be purged with an inert gas. Gö 6976 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of Gö 6976 in these solvents is approximately 10 mg/ml.

Gö 6976 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Gö 6976 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Gö 6976 has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Gö 6976 is a nonglycosidic indolocarbazole that inhibits protein kinase C (PKC) with IC50 values of 2.3 and 6.2 nM for PKC α and PKC β 1, respectively. It does not inhibit the activity of PKC δ , PKC ϵ , or PKC ζ $(IC_{50}s > 3 \mu M)$, indicating a preference for the Ca²⁺-dependent subtypes, PKC α and PKC β 1. Gö 6976 also inhibits the checkpoint kinases Chk1/2. It was shown to abrogate DNA damage-induced S- and G_2 -phase cell cycle arrest, leading to cytotoxicity in p53 mutant tumor cells.^{2,3}

References

- 1. Martiny-Baron, G., Kazanietz, M.G., Mischak, H., et al. Selective inhibition of protein kinase C isoenzymes by the indolocarbazole Gö 6976. J. Biol. Chem. 268, 9194-9197 (1993).
- Kohn, E.A., Yoo, C.J., and Eastman, A. The protein kinase C inhibitor Gö6976 is a potent inhibitor of DNA damage-induced S and G₂ cell cycle checkpoints. Cancer Res. 63, 31-35 (2003).
- 3. Kawabe, T. G2 checkpoint abrogators as anticancer drugs. Mol. Cancer Ther. 3(4), 513-519 (2004).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information Buyer agrees to purchase the material can be found on our website.

Copyright Cayman Chemical Company, 10/14/2022

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