

# PRODUCT INFORMATION



## PKC 412

Item No. 10459

**CAS Registry No.:** 120685-11-2  
**Formal Name:** N-[(9S,10R,11R,13R)-2,3,10,11,12,13-hexahydro-10-methoxy-9-methyl-1-oxo-9,13-epoxy-1H,9H-diindolo[1,2,3-gh:3',2',1'-lm]pyrrolo[3,4-j][1,7]benzodiazonin-11-yl]-N-methyl-benzamide

**Synonyms:** N-Benzoylstaurosporine, CGP 41231, CGP 41251, Midostaurin

**MF:** C<sub>35</sub>H<sub>30</sub>N<sub>4</sub>O<sub>4</sub>

**FW:** 570.6

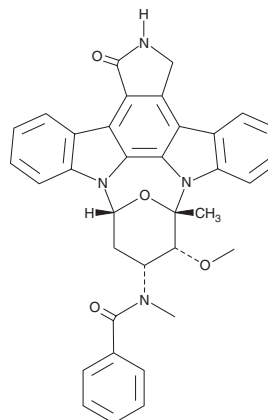
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 244, 293, 334, 355, 372 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

PKC 412 is supplied as a crystalline solid. A stock solution may be made by dissolving the PKC 412 in the solvent of choice, which should be purged with an inert gas. PKC 412 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of PKC 412 in these solvents is approximately 14 and 20 mg/ml, respectively.

## Description

PKC 412 is a cell-permeable, reversible inhibitor of several serine/threonine and tyrosine kinases, including conventional PKC isoforms (α, β, and γ), Syk, FLK1, Akt, PKA, c-Kit, C-Fgr, c-Src, FLT3, PDGFRβ, VEGFR1, and VEGFR2 with IC<sub>50</sub> values ranging from 80-500 nM.<sup>1-4</sup> It also upregulates the expression of endothelial nitric oxide synthase (eNOS) in mice.<sup>5</sup> PKC 412 inhibits growth or induces apoptosis in many cancer cell types, blocks angiogenesis in tumors, and sensitizes cancer cells to ionizing radiation, supporting its use in cancer therapy.<sup>1,3,7</sup>

## References

1. Fabbro, D., Buchdunger, E., Wood, J., et al. *Pharmacol. Ther.* **82(2-3)**, 293-301 (1999).
2. Ozaki, H., Seo, M.-S., Ozaki, K., et al. *Am. J. Pathol.* **156(2)**, 697-707 (2000).
3. Tenzer, A., Zingg, D., Rocha, S., et al. *Cancer Res.* **61(22)**, 8203-8210 (2001).
4. Andrejaskas-Buchdunger, E. and Regenass, U. *Cancer Res.* **52(19)**, 5353-5358 (1992).
5. Li, H., Hergert, S.M., Schäfer, S.C., et al. *Nitric Oxide* **12(4)**, 231-236 (2005).
6. Marmy-Conus, N., Hannan, K.M., and Pearson, R.B. *FEBS Lett.* **519(1-3)**, 135-140 (2002).
7. El Fitori, J., Su, Y., Büchler, P., et al. *Cancer* **110(7)**, 1457-1468 (2007).

### WARNING

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

### SAFETY DATA

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

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

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## 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