

KT5823

Cat. #: K-250

Origin: Isolated from *Nocardiosis* sp. soil fungi.

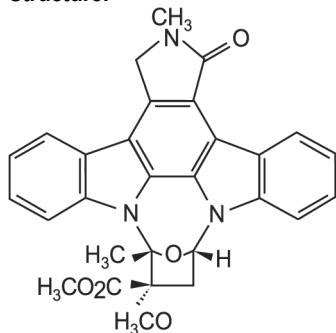
Source description: Semi-synthetic.

M.W.: 495 daltons.

Purity: >98%.

Effective concentration: 500 nM - 1 μ M.

Structure:



Chemical name: (9S,10R,12R)-2,3,9,10,11,12-Hexahydro-10-methoxy-2,9-di methyl-1-oxo-9,12-epoxy-1H-diindolo[1,2,3-fg:3',2',1'-k]pyrrolo[3,4-ij][1,6]benzodiazocine-10-carboxylic acid, methyl ester.

Molecular formula: C₂₉H₂₅N₃O₅.

CAS No.: 126643-37-6.

Activity: KT5823 is a selective and potent inhibitor of PKG (IC₅₀ = 234 nM).

References:

1. Kase, H. *et al.* (1987) *Biochem. Biophys. Res. Commun.* **142**, 436.
2. Hidaka, H. and Kobayashi, R. (1992) *Annu. Rev. Pharmacol. Toxicol.* **32**, 377.

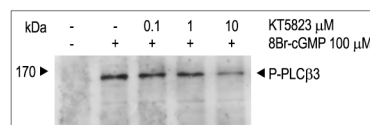
Sizes: 50 μ g, 5 x 50 μ g, or 0.1 mg lyophilized powder.

Storage before reconstitution: Lyophilized powder can be stored intact at room temperature for several weeks. For longer periods, it should be stored at -20°C.

Reconstitution: DMSO. Centrifuge all product preparations before use (10000 x g 5 min).

Storage and stability after reconstitution: Up to one week at 4°C or three months at -20°C.

Bioassay: KT5823 inhibits PLC β 3 phosphorylation via PKG in C6 glioma cells.



Cells were grown to 70% confluence, and then serum starved for 18 h. The cells were then preincubated for 30 min in different concentrations of **KT5823** (#K-250) and stimulated with 8Br-cGMP (100 μ M, 4h, 37°C) for PKG activation. Cell proteins were resolved by SDS-PAGE and probed with anti phospho-PLC β 3. PLC β 3 a substrate of PKG.

For research purposes only, not for human use.
Last Update: May, 2010.