PRODUCT INFORMATION



BMS-265246

Item No. 19168

CAS Registry No.: 582315-72-8

Formal Name: (4-butoxy-1H-pyrazolo[3,4-b]pyridin-5-yl)

(2,6-difluoro-4-methylphenyl)-methanone

MF: $C_{18}H_{17}F_{2}N_{3}O_{2}$

345.3 FW: **Purity:** ≥95%

 λ_{max} : 210, 245, 291 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

BMS-265246 is supplied as a crystalline solid. A stock solution may be made by dissolving the BMS-265246 in the solvent of choice, which should be purged with an inert gas. BMS-265246 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of BMS-265246 in these solvents is approximately 5 and 10 mg/ml, respectively.

BMS-265246 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BMS-265246 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. BMS-265246 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Cyclin-dependent kinases (CDKs) are key regulators of cell cycle progression and are therefore promising targets for cancer therapy. BMS-265246 is a cell-permeable inhibitor of Cdk1/cyclin B and Cdk2/cyclin E $(IC_{50}s = 6 \text{ and } 9 \text{ nM}, \text{ respectively}).^2 \text{ It less potently inhibits Cdk4/cyclin D} (IC_{50} = 0.23 \mu\text{M}).^2 \text{ BMS-265246}$ blocks the cycling of HCT116 cells (EC₅₀ = 0.29-0.49 μ M), resulting in cell cycle arrest in G₂ phase.³

References

- 1. Bettayeb, K., Baunbaek, D., Delehouze, C., et al. CDK inhibitors roscovitine and CR8 trigger McI-I down-regulation and apoptotic cell death in neuroblastoma cells. Genes Cancer 1(4), 369-380 (2010).
- 2. Misra, R.N., Xiao, H., Rawlins, D.B., et al. 1H-Pyrazolo[3,4-b]pyridine inhibitors of cyclin-dependent kinases: Highly potent 2,6-Difluorophenacyl analogues. Bioorg. Med. Chem. Lett. 13(14), 2405-2408 (2003).
- 3. Sutherland, J.J., Low, J., Blosser, W., et al. A robust high-content imaging approach for probing the mechanism of action and phenotypic outcomes of cell-cycle modulators. Mol. Cancer Ther. 10(2), 242-254 (2011).

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.

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