

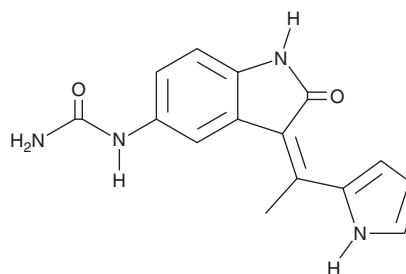
PRODUCT INFORMATION



BX-517

Item No. 29238

CAS Registry No.: 850717-64-5
Formal Name: N-[2,3-dihydro-2-oxo-3-[1-(1H-pyrrol-2-yl)ethylidene]-1H-indol-5-yl]-urea
Synonym: PDK1 Inhibitor II
MF: C₁₅H₁₄N₄O₂
FW: 282.3
Purity: ≥98%
UV/Vis.: λ_{max}: 221, 279, 297, 308, 396 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

BX-517 is supplied as a crystalline solid. A stock solution may be made by dissolving the BX-517 in the solvent of choice, which should be purged with an inert gas. BX-517 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of BX-517 in these solvents is approximately 20 and 14 mg/ml, respectively. BX-517 is also slightly soluble in ethanol.

BX-517 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BX-517 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BX-517 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

BX-517 is an inhibitor of the serine/threonine kinase 3-phosphoinositide-dependent protein kinase 1 (PDK1; IC₅₀ = 6 nM).¹ It binds to the ATP binding pocket of PDK1, inhibits Akt2 activation induced by PDK1 in a cell-free assay (IC₅₀ = 20 nM), and inhibits Akt phosphorylation in PC3 cells.²

References

1. Islam, I., Bryant, J., Chou, Y.-L., *et al.* Indolinone based phosphoinositide-dependent kinase-1 (PDK1) inhibitors. Part 1: Design, synthesis and biological activity. *Bioorg. Med. Chem. Lett.* **17(14)**, 3814-3818 (2007).
2. Islam, I., Brown, G., Bryant, J., *et al.* Indolinone based phosphoinositide-dependent kinase-1 (PDK1) inhibitors. Part 2: Optimization of BX-517. *Bioorg. Med. Chem. Lett.* **17(14)**, 3819-3825 (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.

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