

PRODUCT INFORMATION

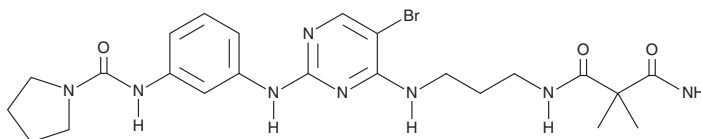


BX-320

Item No. 31229

CAS Registry No.: 702676-93-5
Formal Name: N¹-[3-[[5-bromo-2-[[3-[(1-pyrrolidinylcarbonyl)amino]phenyl]amino]-4-pyrimidinyl]amino]propyl]-2,2-dimethylpropanediamide

MF: C₂₃H₃₁BrN₈O₃
FW: 547.5
Purity: ≥95%
UV/Vis.: λ_{max}: 237, 272 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-320 is supplied as a crystalline solid. A stock solution may be made by dissolving the BX-320 in the solvent of choice, which should be purged with an inert gas. BX-320 is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

Description

BX-320 is an inhibitor of the serine/threonine kinase 3-phosphoinositide-dependent protein kinase 1 (PDK1; IC₅₀ = 30 nM).¹ It is selective for PDK1 over a panel of 10 additional kinases (IC₅₀s = >820 nM for all). BX-320 inhibits Akt and p70S6K1 phosphorylation in PC3 cells (IC₅₀s = 1-3 μM). It induces apoptosis in, and inhibits the growth of, MDA-MB-468 breast cancer cells (IC₅₀s = 0.5 and 0.6 μM, respectively), as well as inhibits cell growth in a panel of cancer cells (IC₅₀s = 0.12-1.2 μM). BX-320 (200 mg/kg) inhibits the growth of lung tumors in a LOX melanoma mouse model of blood-borne metastasis.

Reference

1. Feldman, R.I., Wu, J.M., Polokoff, M.A., *et al.* Novel small molecule inhibitors of 3-phosphoinositide-dependent kinase-1. *J. Biol. Chem.* **280**(20), 19867-19874 (2005).

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
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