

Product Data Sheet

Product Name: BX-320
Cat. No.: GC48433

Chemical Properties

Cas. No. 702676-93-5

SMILES O=C(N1CCCC1)NC2=CC(NC3=NC(NCCCNC(C(C)(C)C(N)=O)=O)=C(Br)C=N3)=CC=C2

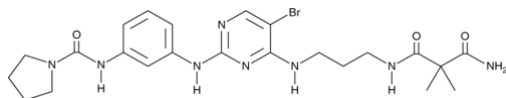
Formula C₂₃H₃₁BrN₈O₃ M.Wt 547.5

Solubility DMSO: soluble Storage -20°C

General For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the tips ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Evaluation sample solution : ship with blue ice All other available size: ship with RT, or Condition blue ice upon request.

Structure



Background

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.

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)

Caution: Product has not been fully validated for medical applications. For research use only.

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