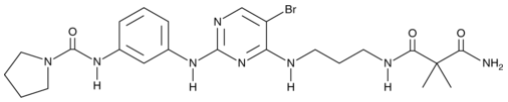
# Product Data Sheet

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 tips | For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months. | | |
| Shipping Condition | Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request. | | |
| Structure |  | | |

## Background

BX-320 is an inhibitor of the serine/threonine kinase 3-phosphoinositide-dependent protein kinase 1 (PDK1; $IC_{50}$ = 30 nM).[1] It is selective for PDK1 over a panel of 10 additional kinases ($IC_{50}$s = >820 nM for all). BX-320 inhibits Akt and p70S6K1 phosphorylation in PC3 cells ($IC_{50}$s = 1-3 µM). It induces apoptosis in, and inhibits the growth of, MDA-MB-468 breast cancer cells ($IC_{50}$s = 0.5 and 0.6 µM, respectively), as well as inhibits cell growth in a panel of cancer cells ($IC_{50}$s = 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-1J. 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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