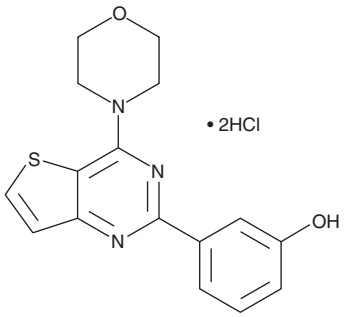
PRODUCT INFORMATION

PI3-Kinase α Inhibitor 2 (hydrochloride)

Item No. 21197

CAS Registry No.: 1188890-32-5
Formal Name: 3-[4-(4-morpholinyl)thieno[3,2-d] pyrimidin-2-yl]-phenol, dihydrochloride
Synonyms: Phosphatidylinositol 3-Kinase α Inhibitor 2, PI3Kα Inhibitor 2
MF: $C_{16}H_{15}N_3O_2S \bullet 2HCl$
FW: 386.3
Purity: ≥98%
UV/Vis.: λ_{max}: 211, 263, 311 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

PI3-Kinase α (PI3Kα) inhibitor 2 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the PI3Kα inhibitor 2 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. PI3Kα inhibitor 2 (hydrochloride) is soluble in the organic solvent DMSO.

Description

PI3Kα inhibitor 2 is an inhibitor of PI3K p110α (IC_{50} = 2 nM in an enzyme assay).[1] It is selective for p110α over p110β, p110γ, and PI3K C2β (IC_{50}s = 16, 660, and 220 nM, respectively). It also inhibits mammalian target of rapamycin (mTOR; IC_{50} = 49 nM).[2] PI3Kα inhibitor 2 inhibits proliferation in A375 melanoma cells with an IC_{50} value of 0.58 µM.[1]

References

1. Hayakawa, M., Kaizawa, H., Moritomo, H., *et al.* Synthesis and biological evaluation of 4-morpholino-2-phenylquinazolines and related derivatives as novel PI3 kinase p110α inhibitors. *Bioorg. Med. Chem.* **14(20)**, 6847-6858 (2006).
2. Verheijen, J.C., Yu, K., Toral-Barza, L., *et al.* Discovery of 2-arylthieno[3,2-d]pyrimidines containing 8-oxa-3-azabi-cyclo[3.2.1]octane in the 4-position as potent inhibitors of mTOR with selectivity over PI3K. *Bioorg. Med. Chem. Lett.* **20(1)**, 375-379 (2010).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM