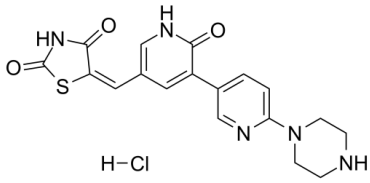
Data Sheet

Product Name:	Protein kinase inhibitors 1 hydrochloride
Cat. No.:	CS-0043431
Molecular Formula:	C18H18ClN5O3S
Molecular Weight:	419.89
Target:	DYRK
Pathway:	Protein Tyrosine Kinase/RTK
Solubility:	DMSO : 30 mg/mL (71.45 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Protein kinase inhibitors 1 hydrochloride is a potent **HIPK2** inhibitor, with **IC_{50}**s of 136 and 74 nM for HIPK1 and HIPK2, and a **K_d** of 9.5 nM for HIPK2. IC50 & Target: IC50: 74 nM (HIPK2), 136 nM (HIPK1)[1]
Kd: 9.5 nM (HIPK2)[1] **In Vitro:** Protein kinase inhibitors 1 hydrochloride is a potent HIPK2 inhibitor, with IC_{50}s of 136 and 74 nM for HIPK1 and HIPK2, and a K_d of 9.5 nM for HIPK2. Protein kinase inhibitors 1 (Compound A64) is not an effective Cdk1 inhibitor (IC_{50} > 10 μM). A64 is moderately selective across a panel of kinases, with K_ds of 3.7 nM (PIM3), 6.1 nM (CSNK2A2), 6.1 nM (CSNK2A2), 8.8 nM (DYRK1A), 9.5 nM (DAPK1), 31 nM (CSNK2A1), 37 nM (PIM1), 130 nM (DRAK2), 150 nM (CLK2), 190 nM (DRAK1), 220 nM (ULK2), 240 nM (CLK1), 250 nM (DYRK2), and 390 nM (ERK8) and IC_{50}s of 19 nM (DYRK1A), 62 nM (DYRK1B), and 74 nM (HIPK2)[1].

References:

[1]. Miduturu CV, et al. High-throughput kinase profiling: a more efficient approach toward the discovery of new kinaseinhibitors. Chem Biol. 2011 Jul 29;18(7):868-79.

CAIndexNames:

Protein kinase inhibitors 1 hydrochloride

SMILES:

O=C(NC/1=O)SC1=C\C2=CNC(C(C3=CC=C(N4CCNCC4)N=C3)=C2)=O.[H]Cl

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