CLK4

CAF-025

Chemical Name: 4-(6-ethoxypyrazolo[1,5-b]pyridazin-3-yl)-N-(3-

methoxyphenyl)pyrimidin-2-amine

CHEBI:143118

Smile String: CCOC1=NN2N=CC(C3=CC=NC(NC4=CC(OC)=CC=C4)=N3)=C2C=C1

Chemical Formula: C₁₉H₁₈N₆O₂

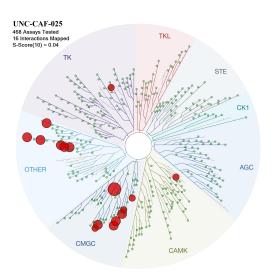
Molecular Weight: 362.39

cLogP: 2.474

Source: SGC-UNC

Biochemical profiling

DiscoverX (403 wild-type human kinases) S₁₀ (1μΜ): 0.042 (17 kinases < 10% control)



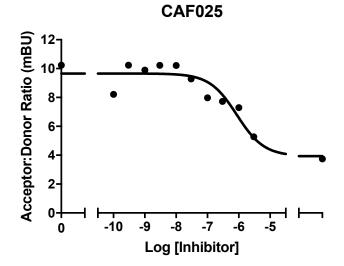
Kinase	% Control @ 1uM
ERK8	0.9
Nek6	1.1
Nek3	1.3
PLK3	1.3
HIPK2	1.6
JNK1	1.8
HIPK1	2.8
CLK4	3.2
Nek5	3.2
Nek9	4.8
Nek7	4.9
JNK3	5.6
CLK1	5.9
PIP5K2C	6.5
DRAK1	8.4
JAK2	9.1
CDKL3	9.9

a. Treespot of DiscoverX KINOMEscan data. b. List of kinases inhibited < 10% control

Cellular target engagement in HEK293 cells

CLK4-NLuc (C term)

 $CLK4 IC_{50} = 867 nM$



Cellular target engagement of CAF-025 with CLK4

Synthetic Route: