CDK₁₆

CAF-204

Chemical Name:

N-(5-(((5-(*tert*-butyl)oxazol-2-yl)methyl)thio)thiazol-2-yl)-1-(dimethylglycyl)piperidine-4-carboxamide

CHEBI:143123
Smile String:

O=C(NC1=NC=C(S1)SCC2=NC=C(O2)C(C)(C)C)C3CCN(CC3)C(CN(C)C)=O

Chemical Formula: C21H31N5O3S2

Molecular Weight: 465.63

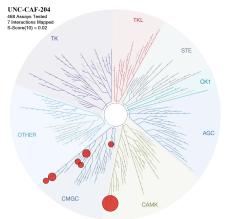
cLogP: 0.305

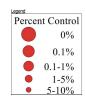
Source: SGC-UNC **Reference**: N/A

Biochemical profiling

DiscoverX (403 wild-type human kinases) S₁₀ (1μΜ): 0.017 (7 kinases < 10% control)

CDK16 K_d = 20 nM





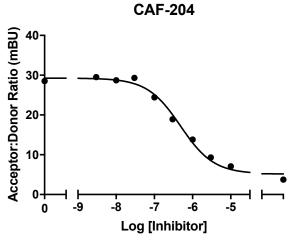
Kinase	% Control @ 1uM
SIK	0
PCTK1	2.7
CDK7	3
PCTK2	5.7
CDKL5	6.3
CDK4-	
cyclinD1	7.7
CDC2L5	8.2

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

Cellular target engagement in HEK293 cells



CDK16 $IC_{50} = 480 \text{ nM}$



CDK16 IC₅₀ = 484 nM

Cellular target engagement of CAF-204 with CDK16/Cyclin Y

Synthetic Route: