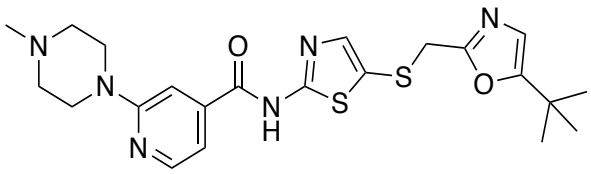
CDKL2

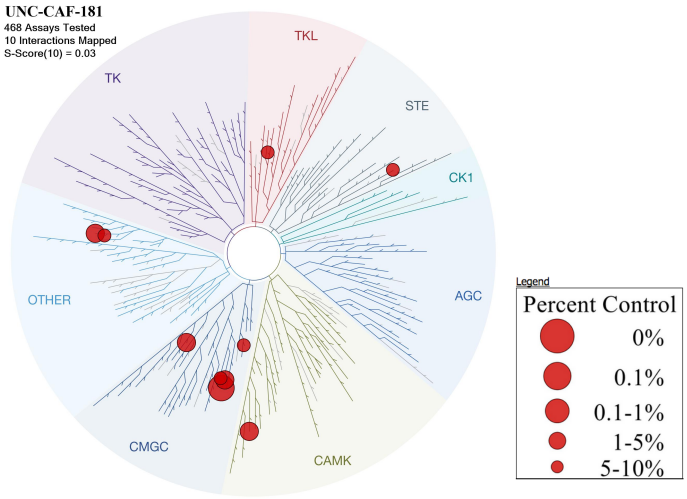


UNC-CAF-181

Chemical Name: *N*-(5-(((5-(*tert*-butyl)oxazol-2-yl)methyl)thio)thiazol-2-yl)-2-(4-methylpiperazin-1-yl)isonicotinamide
CHEBI:143105
Smile String:
O=C(NC1=NC=C(S1)SCC2=NC=C(O2)C(C)(C)C)C3=CC=NC(N4CCN(C)CC4)=C3
Chemical Formula: $C_{22}H_{28}N_6O_2S_2$
Molecular Weight: 472.63
cLogP: 0.951
Source: SGC-UNC
Reference: N/A

Biochemical profiling

DiscoverX (403 wild-type human kinases)
S_{10} (1μM): 0.025 (10 kinases < 10% control)
CDKL2 K_d = 63nM

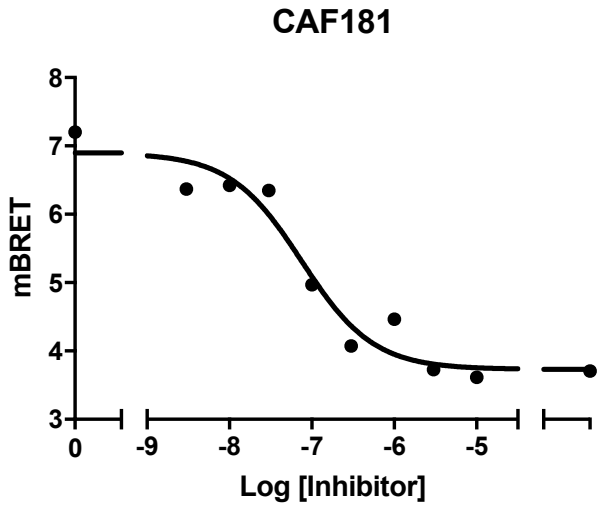


Kinase	% Control @ 1uM
CLK4	0.5
CLK1	1.1
SNARK	1.1
ULK2	2.6
CDK7	3.8
CDKL2	5.8
TGFBR2	7.3
CLK2	7.7
ULK1	7.7
NIK	9

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

Cellular target engagement in HEK293 cells

CDKL2-NLuc (N term)
CDKL2 – 75 nM



Cellular target engagement of UNC-CAF-181 with CDKL2

Synthetic Route: