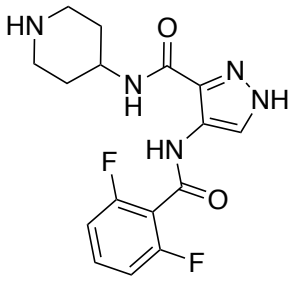
CDK17

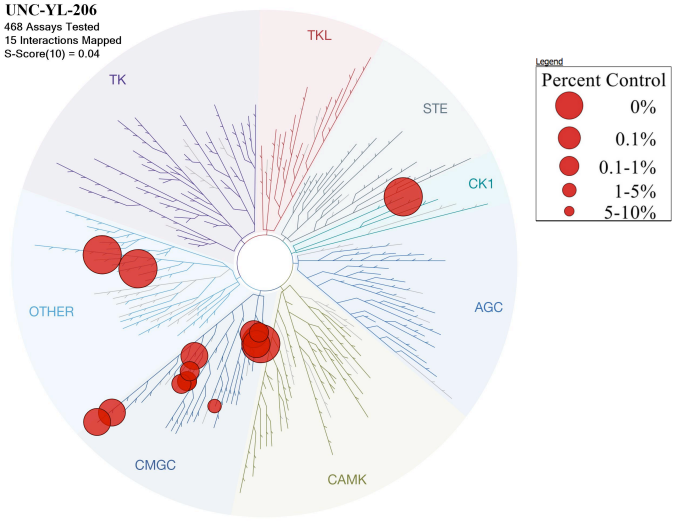


YL-206

Chemical Name:
4-(2,6-difluorobenzamido)-*N*-(piperidin-4-yl)-1*H*-pyrazole-3-carboxamide
CHEBI:143124
Smile String:
O=C(C1=C(F)C=CC=C1F)NC2=CNN=C2C(NC3CCNCC3)=O
Chemical Formula: $C_{16}H_{17}F_2N_5O_2$
Molecular Weight: 349.34
cLogP: -1.154
Source: SGC-UNC
Reference: N/A

Biochemical profiling

DiscoverX (403 wild-type human kinases)
S_{10} (1μM): 0.037 (15 kinases < 10% control)
CDK17 K_d = 27 nM



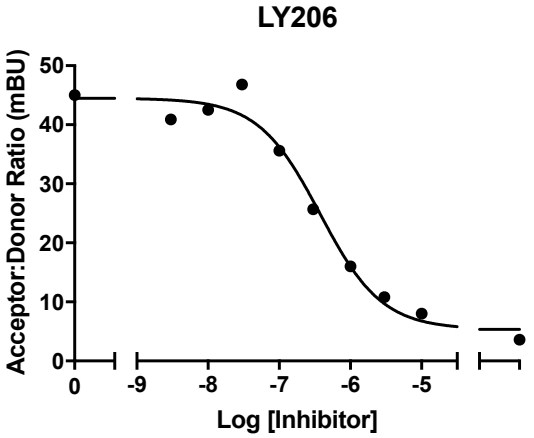
Kinase	% Control @ 1uM
CSNK1G1	0
GAK	0
ICK	0
NEK2	0
CDK16	0.2
CDKL5	0.4
CDK17	0.5
CDK7	0.6
GSK3B	0.6
CDK11A	2.3
GSK3A	2.4
CDK11B	4
CDK9	4.5
CDK13	4.8
DYRK1A	5.1

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

Cellular target engagement in HEK293 cells

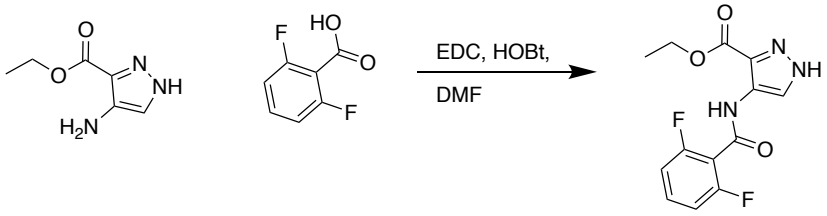
CDK17-NLuc (C term)

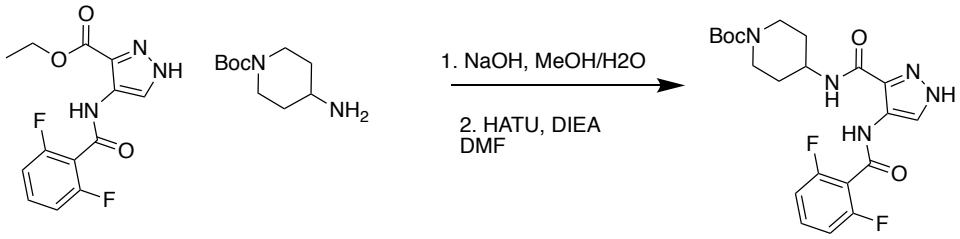
CDK17 IC_{50} = 380 nM

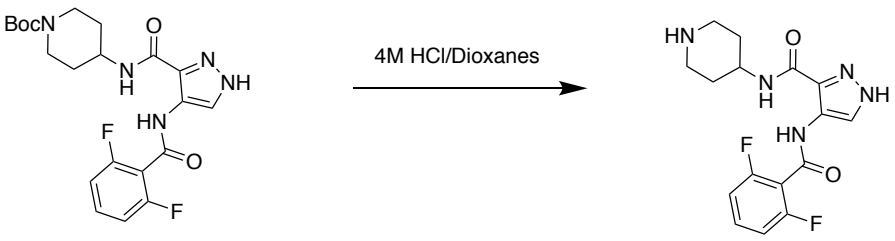


Cellular target engagement of YL-206 with CDK17 / Cyclin Y

Synthetic Route:







Solvent: DMSO-d_6
Frequency: 400 MHz