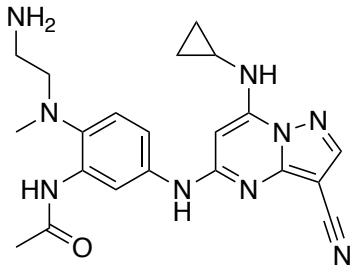
DYRK2



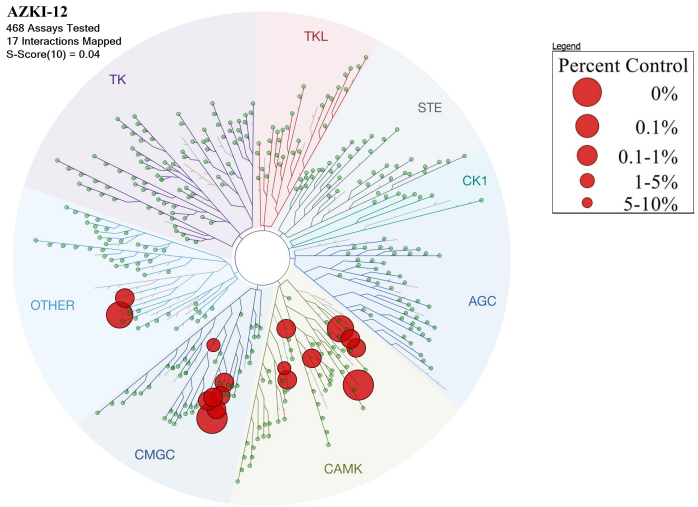
AZ-G/AZKI-012a

Chemical Name: *N*-(2-((2-aminoethyl)(methyl)amino)-5-((3-cyano-7-(cyclopropylamino)pyrazolo[1,5-*a*]pyrimidin-5-yl)amino)phenyl)acetamide
CHEBI:143115
Smile String:
CN(C1=CC=C(NC2=NC3=C(C#N)C=NN3C(N([H])C4CC4)=C2)C=C1NC(C)=O)CCN
Chemical Formula: $C_{21}H_{25}N_9O$
Molecular Weight: 419.49
cLogP: -0.5034
Source: SGC-UNC
Reference: Dowling, J .E.; *et al*. "Potent and selective CK2 kinase inhibitors with effects on Wnt pathway signaling *in vivo*." *ACS Med Chem Lett*. **2016**, *7*, 300–305.

Biochemical profiling

DiscoverX (403 wild-type human kinases)
S_{10} (1μM): 0.042 (17 kinases < 10% control)

DYRK2 K_d (DiscoverX) = 4.3 nM



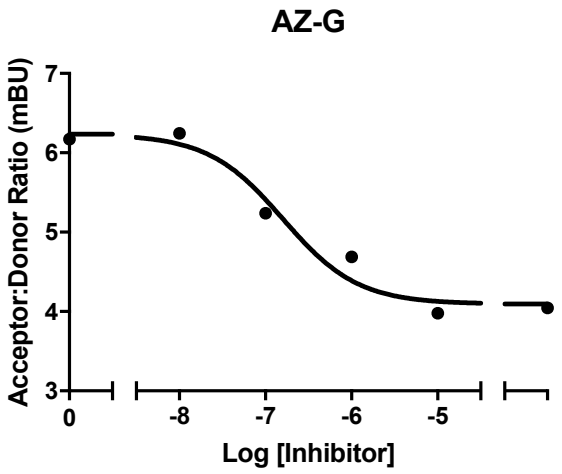
List of kinases inhibited < 10% control

Kinase	% Control @ 1uM
RPS6KA4	0.1
HIPK2	0.1
CSNK2A2	0.5
DAPK2	0.7
DAPK3	1.1
CHEK2	1.4
HIPK3	1.6
DAPK1	1.8
HIPK1	1.9
DYRK1A	2.1
DCAMKL3	2.2
BUB1	3.7
HIPK4	4.1
PIM3	4.7

Cellular target engagement in HEK293 cells

DYRK2-NLuc (C term)

DYRK2 IC_{50} = 160 nM



Cellular target engagement of AZ-G with DYRK2