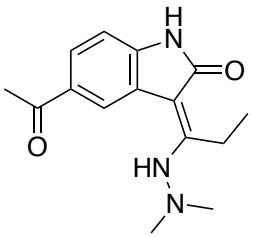
DYRK1B



BI00036838

Chemical Name: (*E*)-5-acetyl-3-(1-(2,2-dimethylhydrazineyl)propylidene)indolin-2-one

CHEBI:143116

Smile String: O=C(C)C(C=C1)=CC(/C2=C(CC)\NN(C)C)=C1NC2=O

Chemical Formula: $C_{15}H_{19}N_3O_2$

Molecular Weight: 273.34

cLogP: 0.8022

Source: SGC-UNC

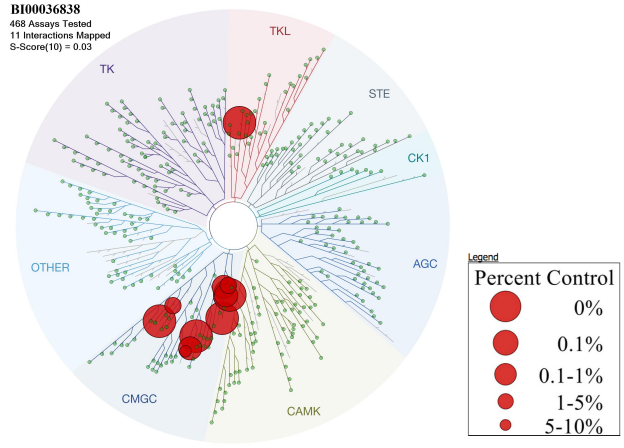
Reference: WO 2005087727

Biochemical profiling

DiscoverX (403 wild-type human kinases)

S_{10} (1μM): 0.03 (12 kinases < 10% control)

DYRK1B K_d (DiscoverX) = 35 nM



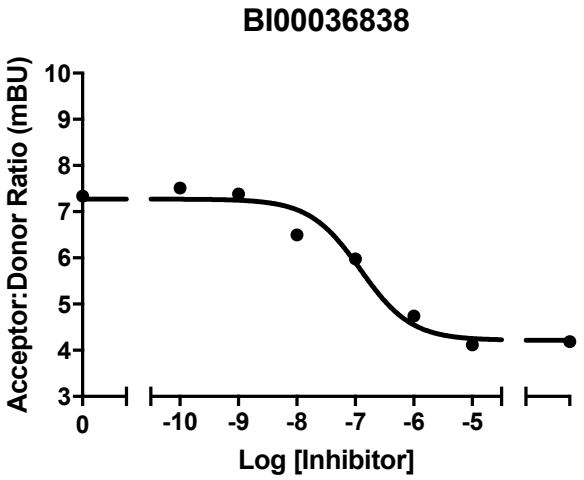
List of kinases inhibited < 10% control

Kinase	% Control @ 1uM
RIPK4	0
PIK4CB	0
ICK	0
DYRK1B	0
CDKL3	0
CDK19	0
GSK3B	0.2
DYRK1A	0.5
CDKL5	0.5
DYRK1A	0.5
GSK3B	1
CDK7	4.2
DYRK2	5.8

Cellular target engagement in HEK293 cells

NLuc-DYRK1B (N term)

DYRK1B IC_{50} = 120 nM



Cellular target engagement of BI00036838 with DYRK1B