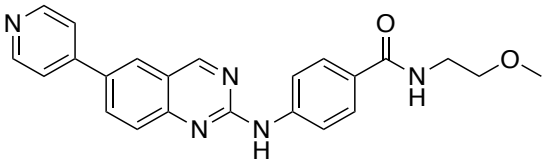
MKNK2

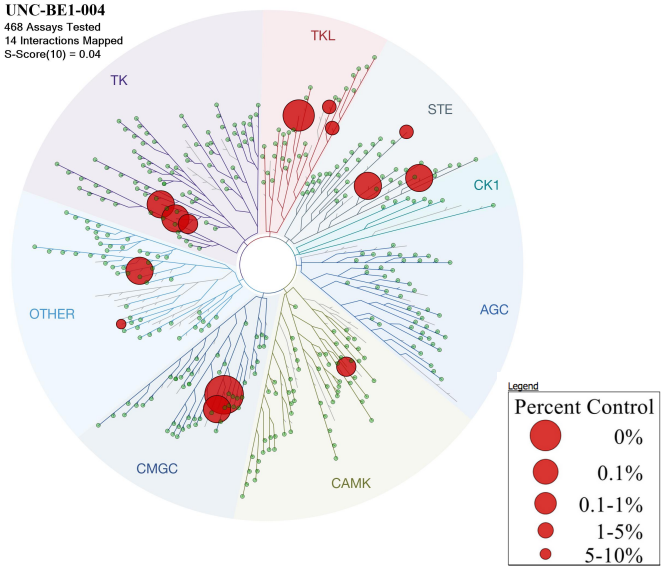


UNC-BE1-004

Chemical Name: *N*-(2-methoxyethyl)-4-((6-(pyridin-4-yl)quinazolin-2-yl)amino)benzamide
CHEBI:143119
Smile String:
O=C(C1=CC=C(NC2=NC3=CC=C(C4=CC=NC=C4)C=C3C=N2)C=C1)NCCOC
Chemical Formula: $C_{23}H_{21}N_5O_2$
Molecular Weight: 399.45
cLogP: 1.3218
Source: SGC-UNC
Reference: n/a

Biochemical profiling

DiscoverX (403 human kinases)
S_{10} (1μM): 0.037 (15 kinases < 10% control)



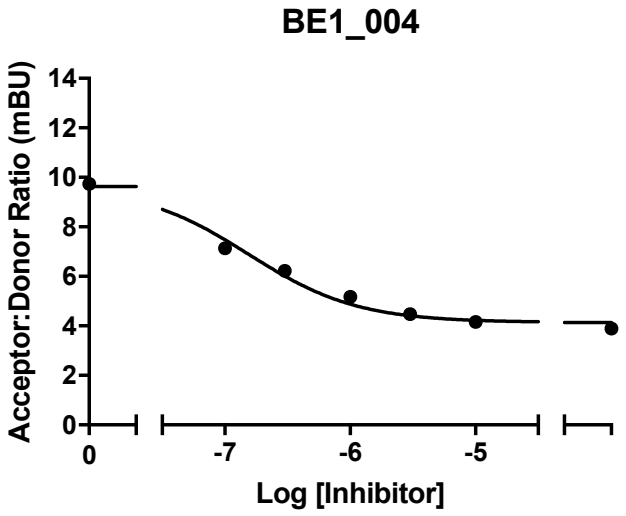
Kinase	% Control @ 1uM
DYRK1B	0
PIP5K1C	0
BMPR1B	0.1
Mek5	0.4
DYRK1A	0.4
PDGFRB	0.5
GAK	0.5
DYRK1A	0.7
YSK4	0.7
KIT	0.9
PDGFRA	1
MKNK2	1.6
PIP5K2C	2.2
BRAF	5.6
MINK	8.2
ZAK	9.3

List of kinases inhibited < 10% control

Cellular target engagement in HEK293 cells

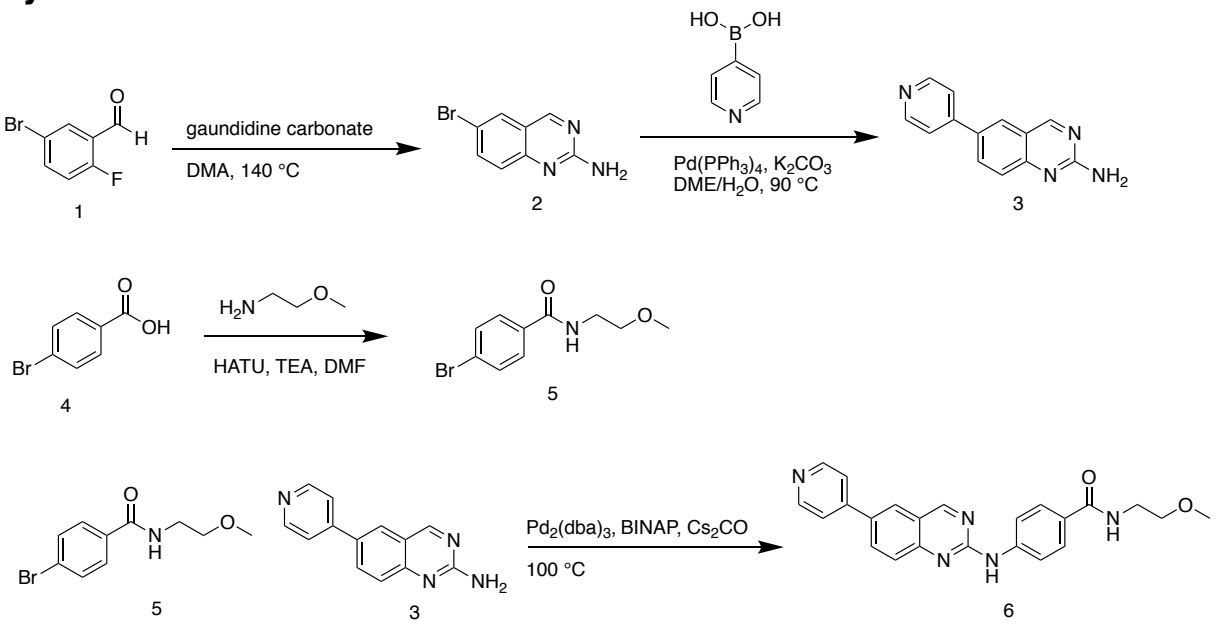
NLuc-MKNK2 (N term)

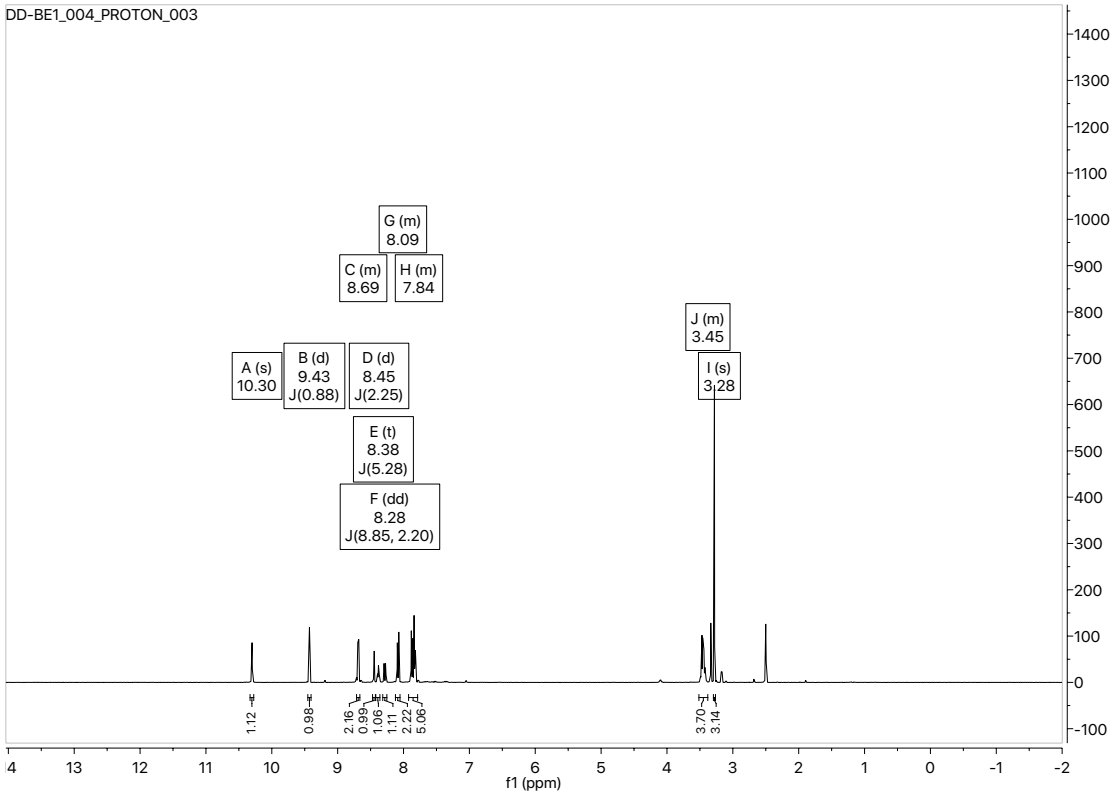
MKNK2 IC_{50} = 156 nM



Cellular target engagement of UNC-BE1-004 with MKNK2

Synthetic Route





Solvent: DMSO-d_6
Frequency: 400 MHz