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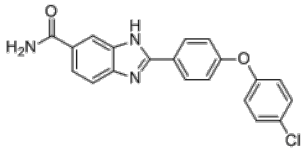
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	BML-277
Cat. No.	:	PC-49284
CAS No.	:	516480-79-8
Molecular Formula	:	$C_{20}H_{14}ClN_3O_2$
Molecular Weight	:	363.80
Target	:	Checkpoint Kinase (Chk)
Solubility	:	10 mM in DMSO



Biological Activity

BML-277 (BML277) is a potent, selective and ATP-competitive inhibitor of **Chk2** serine/threonine kinase with IC50 of 15 nM, >1000-fold selectivity over Chk1 and Cdk1/B kinases.
BML-277 dose dependently protects human CD4+ and CD8+ T-cells from apoptosis due to ionizing radiation.
BML-277 specifically inhibit CHK2 phosphorylation at Thr68 at different time course, but not CHK1 phosphorylation.
BML-277 significantly promoted pneumonia symptoms, including mortality, lung infiltration of immune cells, and the abundance of lung pro-inflammatory cytokines in vivo.
BML-277 reduced protein poly(ADP-ribosyl)ation (PARylation), FANCD2 monoubiquitination, homologous recombination and OR CRC cell growth in vitro and in vivo.

References

Kristen L Arienti, et al. ***J Med Chem***. 2005 Mar 24;48(6):1873-85.

Xie F, et al. ***Exp Lung Res***. 2022 Jan 25:1-8.

Hsieh CC, et al. ***Br J Cancer***. 2022 Aug 23. doi: 10.1038/s41416-022-01946-9.

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