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Data Sheet

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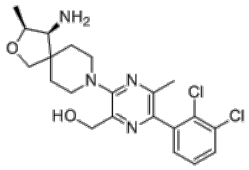
Product Name	:	RMC-4550
Cat. No.	:	PC-35116
CAS No.	:	2172651-73-7
Molecular Formula	:	$C_{21}H_{26}Cl_2N_4O_2$
Molecular Weight	:	437.365
Target	:	Protein Phosphatase/PTP
Solubility	:	10 mM in DMSO



2. Nichols RJ, et al. ***Nat Cell Biol.*** 2018 Sep;20(9):1064-1073.

Biological Activity

RMC-4550 (RMC4550) is a potent, selective, allosteric inhibitor of **SHP2** with IC50 of 0.58 nM (full-length SHP2 enzyme), suppresses pERK signaling in Calu-1 cells with IC50 of 7 nM.
RMC-4550 shows no activity against the SHP2 catalytic domain up to 10 uM, RMC-4550 is highly selective for full-length SHP2 across panels comprising 15 other phosphatases, 468 kinases, and 44 cellular targets.
Cancer cell lines bearing missense mutations in KRAS at G12, but neither G13 nor Q61, exhibit sensitivity to RMC-4550 (IC50<2 uM), suppresses growth and RAS/MAPK signaling in cancer cell lines with Class 3 BRAF mutations.
RMC-4550 inhibits tumor growth and RAS/MAPK signaling in xenograft models of KRASG12C-driven cancer.

References

Robert J. Nichols, et al. Efficacy of SHP2 phosphatase inhibition in cancers with nucleotide-cycling oncogenic RAS, RAS-GTP dependent oncogenic BRAF and NF1 loss. http://dx.doi.org/10.1101/188730.