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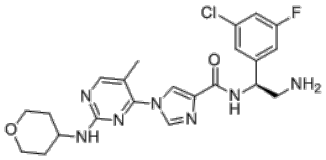
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	ASN007
Cat. No.	:	PC-72428
CAS No.	:	2055597-12-9
Molecular Formula	:	$C_{22}H_{25}ClFN_7O_2$
Molecular Weight	:	473.937
Target	:	ERK
Solubility	:	10 mM in DMSO



Biological Activity

ASN007 (ASN-007) is a potent, selective, orally bioavailable **ERK1/2** inhibitor with IC50 of 2 nM against both.
ASN007 demonstrated a selective inhibition of ERK1/2 kinases at 1 uM in a panel of 335 serine/threonine, tyrosine, and protein lipid kinases.
ASN007 shows strong antiproliferative activity in cancer cells harboring mutations in BRAF and RAS (KRAS, NRAS, and HRAS) with median IC50 of 37 nM (range, 13-100 nM), without effect againstcell lines without the mutations (IC50>10,000 nM).
ASN007 demonstrates activity in a BRAFV600E mutant melanoma tumor model that is resistant to BRAF and MEK inhibitors. The PI3K inhibitor copanlisib enhances the antiproliferative activity of ASN007 both in vitro and in vivo due to dual inhibition of RAS/MAPK and PI3K survival pathways, decreases the phosphorylation of ERK1/2 target proteins RSK and MSK.

References

Ana Portelinha, et al. ***Cell Rep Med.*** 2021 Jul 21;2(7):100350.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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