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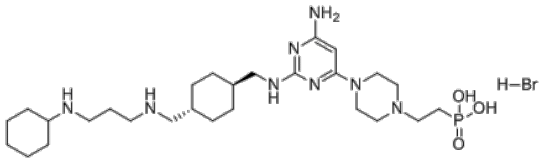
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	TG-0054
Cat. No.	:	PC-21292
CAS No.	:	1191450-19-7
Molecular Formula	:	$C_{27}H_{52}BrN_8O_3P$
Molecular Weight	:	647.64
Target	:	Chemokine Receptor (CCR and CXCR)
Solubility	:	10 mM in DMSO



Biological Activity

TG-0054 (Burixafor, GPC-100) is a novel small molecule antagonist of **CXCR4**, shows competitive inhibition of CXCL12 binding to CXCR4 with Ki of 1.6 nM.
GPC-100 (TG-0054, Burixafor) demonstrates distinct divergence from AMD3100, and has a higher affinity for CXCR4 than AMD3100 (Ki=40 nM).
GPC-100 (TG-0054, Burixafor) dose dependenlyt inhibits CXCL12-induced calcium flux in MDA-MB-231 cells overexpressing CXCR4 with IC50 value of 30 nM.
GPC-100 (TG-0054, Burixafor) inhibits CXCL12 mediated recruitment of β-arrestin to CXCR4 with IC50 value of 207 nM in the PRESTO-TANGO β-arrestin assay.
GPC-100 (TG-0054, Burixafor) efficiently blocks CXCL12-mediated migration in U937 and MM.1S cells with IC50 of 48 nM and 28 nM, respectively.

References

Sukhtankar DD, et al. ***PLoS One.*** 2023 Oct 25;18(10):e0287863.

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

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