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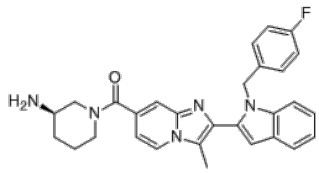
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	JBI-589
Cat. No.	:	PC-49339
CAS No.	:	2308504-22-3
Molecular Formula	:	$C_{29}H_{28}FN_5O$
Molecular Weight	:	481.575
Target	:	Protein Arginine Deiminase (PAD)
Solubility	:	10 mM in DMSO



1. Deng H, et al. ***Cancer Res***. 2022 Oct 4;82(19):3561-3572.

Biological Activity

JBI-589 (JBI589) is potent, selective, orally active **PAD4** small molecule inhibitor, reduces CXCR2 expression and blocks neutrophil chemotaxis.
In vitro, JBI-589 inhibited PMA-induced citrullination of histone H3 in mouse neutrophils in a dose-dependent manner.
JBI-589 demonstrated excellent oral bioavailability with maximum concentration in plasma achieved 0.5h after oral administration and halflife of 6.3h.
JBI-589 significantly and specifically downregulated CXCR2 expression on neutrophil, and reduced their CXCL1-induced migration.
JBI-589 treatment markedly reduced primary tumor growth LL2-bearing and B16F10-bearing mice, also improved the effect of immune checkpoint blockade (ICB).

References