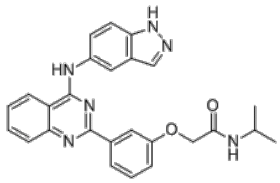
ProbeChem®
Expedite Your Scientific Research

WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	KD025
Cat. No.	:	PC-73191
CAS No.	:	911417-87-3
Molecular Formula	:	$C_{26}H_{24}N_6O_2$
Molecular Weight	:	452.518
Target	:	ROCK
Solubility	:	10 mM in DMSO



Biological Activity

KD025 (Belumosudil, SLx-2119) is a potent, selective **ROCK2** inhibitor with IC50 of 105 nM.
KD025 displays >200-fold selectivity over ROCK1 (IC50>20 uM).
KD025 dose-dependently reduced infarct volume after transient middle cerebral artery occlusion, cortical perfusion in a distal middle cerebral artery occlusion model.
KD025 significantly diminished STAT3 phosphorylation and binding to IL-17 and IL-21 promoters and reduced IRF4 and nuclear hormone RAR-γt protein levels in T cells derived from healthy subjects or rheumatoid arthritis patients.
KD025 in vivo down-regulates the progression of collagen-induced arthritis in mice via targeting of the Th17-mediated pathway.
KD025 inhibits the secretion of IL-21, IL-17, and INF-γ along with decreasing p-STAT3 and reduced protein expression of IRF4 and BCL6 in human PBMCs purified from active cGVHD patients.

References

Flynn R, et al. ***Blood.*** 2016 Apr 28;127(17):2144-54.

Zanin-Zhorov A, et al. ***Proc Natl Acad Sci U S A.*** 2014 Nov 25;111(47):16814-9.

Lee JH, et al. ***Ann Clin Transl Neurol.*** 2014 Jan 1;1(1):2-14.

E-mail: tech@probechem.com