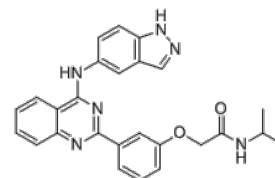


Product Name : KD025
Cat. No. : PC-73191
CAS No. : 911417-87-3
Molecular Formula : C₂₆H₂₄N₆O₂
Molecular Weight : 452.518
Target : ROCK
Solubility : 10 mM in DMSO



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 μM).

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

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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.

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

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