

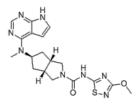
Data Sheet

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Product Name : Ivarmacitinib
Cat. No. : PC-73423
CAS No. : 1445987-21-2
Molecular Formula : C₁₈H₂₂N₈O₂S
Molecular Weight : 414.488
Target : JAK

Solubility: 10 mM in DMSO



Biological Activity

Ivarmacitinib (SHR0302) is a potent highly selective, Janus kinase 1 (**JAK1**) inhibitor with IC50 of 0.1 nM, 9-fold selectivity over JAK2 and >70-fold over JAK3 and TYK2.

SHR0302 is a synthetic molecule that potently inhibits all members of the JAK family, particularly JAK1.

SHR0302 suppressed the severity of adjuvant-induced arthritis (AA) rats by attenuating the arthritis index, arthritis global assessment and paw swelling degree, and alleviated histopathology of spleen and joint of AA rats.

SHR0302 inhibited the proliferation of T, B and FLS, and down-regulated cytokines TNF- α , IL-1 β , IL-17 and antibody IgG1, IgG2a levels, and suppressed the proportion of Th17 and total B, and inhibited JAK1-STAT3 phosphorylation. SHR0302 (1-10,000 nM) exerted an inhibitory effect on the activation, proliferation and migration of hepatic stellate cells (HSCs).

References

Wu H, et al. Joint Bone Spine. 2016 Oct;83(5):525-32.

Gu YJ, et al. *Int J Mol Med*. 2016 Sep;38(3):903-11.

Zhao Y, et al. *Am J Clin Dermatol*. 2021 Nov;22(6):877-889.

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

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