

Data Sheet

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Product Name : Decernotinib
Cat. No. : PC-43049
CAS No. : 944842-54-0
Molecular Formula : C₁₈H₁₉F₃N₆O
Molecular Weight : 392.3783
Target : JAK

Solubility : 10 mM in DMSO

Biological Activity

Decernotinib (VX-509, VRT-831509) is a potent, selective, orally available **JAK3** inhibitor with Ki of 2.5 nM and cellular IC50 of 50-170 nM, demonstrates limited inhibition of JAK1/JAK2/TYK2 in cell-based assays (25-100 fold).

Decernotinib also inhibits JAK1, JAK2 and TYK2 (Ki=11, 13 and 11 nM) in biochemical assay and shows >400-fold selectivity over a broad kinases.

Decernotinib inhibits IL-2-induced STAT-5 phosphorylation in IL-2-dependent T-cell line with IC50 of 99 nM, potently suppresses T-cell proliferation with IC50 of 170 nM.

Decernotinib modulates proinflammatory response in models of immune-mediated diseases, such as collagen-induced arthritis and delayed-type hypersensitivity.

References

Farmer LJ, et al. *J Med Chem*. 2015 Sep 24;58(18):7195-216.

Mahajan S, et al. *J Pharmacol Exp Ther.* 2015 May;353(2):405-14.

Genovese MC, et al. Arthritis Rheumatol. 2016 Jan;68(1):46-55.

Genovese MC, et al. *Ann Rheum Dis*. 2016 Nov;75(11):1979-1983.

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

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