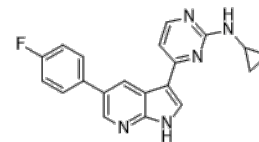


Product Name : JAK3 inhibitor MJ04
Cat. No. : PC-22203
CAS No. : 2099014-23-8
Molecular Formula : C₂₀H₁₆FN₅
Molecular Weight : 345.38
Target : JAK
Solubility : 10 mM in DMSO



CAS: 2099014-23-8

Biological Activity

JAK3 inhibitor MJ04 is a potent and highly selective, ATP competitive **JAK3** inhibitor with IC₅₀ of 2.03 nM (2.5 μM ATP), >90-fold selectivity over JAK1 and JAK2, shows potential hair growth promoter activity.

MJ04 also displays high selectivity over a panel of other kinases which include IGF1R, GSK3β, EGFR, p110α, p110β, p110γ and p110δ.

MJ04 (0.37-6 μM) significantly decreases the phosphorylation status of STAT3 at Tyr705 in A549 cells.

MJ04 (0.08mg/kg, topically applied) promotes hair regrowth in the DHT induced AGA mice model.

MJ04 dampens the naive T-cell differentiation into proinflammatory phenotypes and inhibits the proinflammatory cytokines in LPS-induced macrophages.

References

Md Mehedi Hossain, et al. *J Transl Med.* 2024 Apr 18;22(1):370.

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

E-mail: tech@probechem.com