

Data Sheet

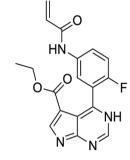
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 $\begin{tabular}{lll} \textbf{Product Name} & : JAK \ 3i \\ \textbf{Cat.No.} & : URK-V2504 \\ \textbf{CAS No.} & : 1918238-72-8 \\ \textbf{Molecular Formula} & : C_{18}H_{15}FN_4O_3 \\ \end{tabular}$

Molecular Weight :354.34

Target : Solubility :



Biological Activity

JAK 3i is a promising drug candidate that has been developed to inhibit the activity of Janus Kinase 3 (JAK3), an enzyme that is involved in the signaling pathways of cytokines and growth factors. JAK3 plays an important role in the development of inflammatory and autoimmune diseases such as rheumatoid arthritis, psoriasis, multiple sclerosi and ulcerative colitis. By selectively targeting JAK3, JAK 3i could potentially provide a new treatment option for these diseases.

The principle of JAK 3i's inhibitory action is through binding to the ATP-binding site of JAK3 and preventing the phosphorylation and activation of downstream signaling pathways. By inhibiting JAK3 activity, JAK 3i can reduce the production of pro-inflammatory cytokines and chemokines, and thus reduce inflammation and tissue damage.

References

- 1. Kitzmüller C, Sexl V, Scherzer J, et al. The impact of Janus kinase 3 inhibition on regulatory T cells: A new therapeutic approach in autoimmune disease? Pharmacol Ther. 2020;213:107562.
- 2. Rubbert-Roth A, Guo Q, Biswas R, et al. Trial of Upadacitinib and Abatacept in Rheumatoid Arthritis (SELECT-EARLY): A Multi-Center, Randomized, Double-Blind, Parallel-Group, Active Comparator-Controlled Phase 3 Trial. Lancet. 2021;397(10277):2516-2528.
- 3. Yiu ZZ, Krueger JG, Lebwohl MG. What's New in Psoriasis Research and Treatment? Dermatol Clin. 2021;39(2):203-211.

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