

PRODUCT INFORMATION



JNJ-53718678

Item No. 31720

CAS Registry No.: 1383450-81-4
Formal Name: 3-[[5-chloro-1-[3-(methylsulfonyl)propyl]-1H-indol-2-yl]methyl]-1,3-dihydro-1-(2,2,2-trifluoroethyl)-2H-imidazo[4,5-c]pyridin-2-one

MF: C₂₁H₂₀ClF₃N₄O₃S

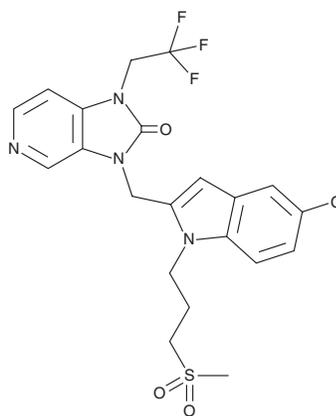
FW: 500.9

Purity: ≥95%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

JNJ-53718678 is supplied as a crystalline solid. A stock solution may be made by dissolving the JNJ-53718678 in the solvent of choice, which should be purged with an inert gas. JNJ-53718678 is soluble in the organic solvent methanol.

Description

JNJ-53718678 is an inhibitor of respiratory syncytial virus (RSV) fusion.¹ JNJ-53718678 binds to and stabilizes the RSV fusion protein in its prefusion conformation.² It reduces RSV replication in RSV-infected HeLa cells (IC₅₀ = 0.5 nM) with a 50% cytotoxic concentration (CC₅₀) of greater than 50 μM.¹ JNJ-53718678 (4-100 mg/kg), administered prior to infection, reduces RSV viral titers in lavaged-lung tissue and viral RNA production in the lungs in a semi-permissive cotton rat model of RSV.² JNJ-53718678 also reduces RSV viral titers in bronchoalveolar lavage fluid (BALF) in a fully replicative neonatal lamb model of RSV when administered at doses of 5 and 25 mg/kg per day.

References

1. Vendeville, S., Tahri, A., Hu, L., *et al.* Discovery of 3-([5-Chloro-1-[3-(methylsulfonyl)propyl]-1H-indol-2-yl]methyl)-1-(2,2,2-trifluoroethyl)-1,3-dihydro-2H-imidazo[4,5-c]pyridin-2-one (JNJ-53718678), a potent and orally bioavailable fusion inhibitor of respiratory syncytial virus. *J. Med. Chem.* **63**(15), 8046-8058 (2020).
2. Roymans, D., Alnajjar, S.S., Battles, M.B., *et al.* Therapeutic efficacy of a respiratory syncytial virus fusion inhibitor. *Nat. Commun.* **8**(1), 167 (2017).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM