

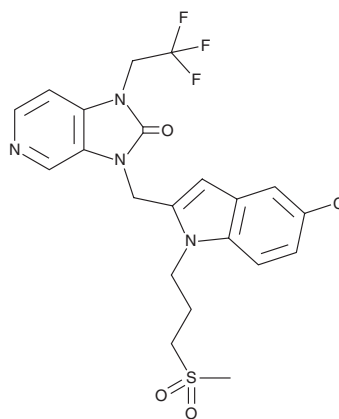
# PRODUCT INFORMATION



**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:** C<sub>21</sub>H<sub>20</sub>ClF<sub>3</sub>N<sub>4</sub>O<sub>3</sub>S  
**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.<sup>1</sup> JNJ-53718678 binds to and stabilizes the RSV fusion protein in its prefusion conformation.<sup>2</sup> It reduces RSV replication in RSV-infected HeLa cells (IC<sub>50</sub> = 0.5 nM) with a 50% cytotoxic concentration (CC<sub>50</sub>) of greater than 50 μM.<sup>1</sup> 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.<sup>2</sup> 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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