PRODUCT INFORMATION



RSV-604

Item No. 29041

CAS Registry No.: 676128-63-5

Formal Name: N-[(3S)-2,3-dihydro-2-oxo-5-phenyl-

1H-1,4-benzodiazepin-3-yl]-N'-(2-

fluorophenyl)-urea

MF: $C_{22}H_{17}FN_4O_2$

388.4 FW: **Purity:** ≥98% UV/Vis.: λ_{max} : 236 nm Supplied as: A 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

RSV-604 is supplied as a solid. A stock solution may be made by dissolving the RSV-604 in the solvent of choice, which should be purged with an inert gas. RSV-604 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of RSV-604 in these solvents is approximately 5, 20, and 30 mg/ml, respectively.

RSV-604 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RSV-604 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. RSV-604 has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

RSV-604 is an inhibitor of respiratory syncytial virus (RSV) that binds to RSV nucleoprotein $(K_A = 1.31 \mu M)$. It reduces plaque formation by RSS, Long, A2, and B RSV strains (EC₅₀s = 0.9, 0.8, 0.5, and $0.6 \,\mu\text{M}$, respectively) and is active against 40 RSV clinical isolates (mean EC₅₀ = $0.8 \,\mu\text{M}$). RSV-604 increases viability of RSV-infected HEp-2 cells (EC₅₀ = 0.86μ M) and inhibits RSV replication in human airway epithelial (HAE) cell monolayers following mucosal inoculation.

References

- 1. Challa, S., Scott, A.D., Yuzhakov, O., et al. Mechanism of action for respiratory syncytial virus inhibitor RSV604. Antimicrob. Agents Chemother. 59(2), 1080-1087 (2015).
- 2. Chapman, J., Abbott, E., Alber, D.G., et al. RSV604, a novel inhibitor of respiratory syncytial virus replication. Antimicrob. Agents Chemother. 51(9), 3346-3353 (2007).

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

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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