

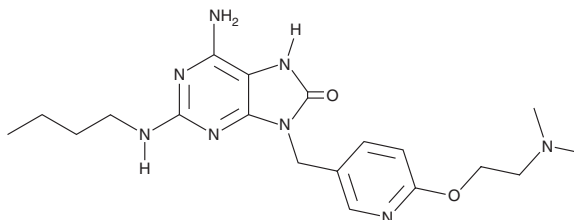
PRODUCT INFORMATION



DSR 6434

Item No. 34331

CAS Registry No.: 1059070-10-8
Formal Name: 6-amino-2-(butylamino)-9-[[6-[2-(dimethylamino)ethoxy]-3-pyridinyl]methyl]-7,9-dihydro-8H-purin-8-one
MF: C₁₉H₂₈N₈O₂
FW: 400.5
Purity: ≥98%
UV/Vis.: λ_{max}: 253 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥42 years



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

Laboratory Procedures

DSR 6434 is supplied as a solid. A stock solution may be made by dissolving the DSR 6434 in the solvent of choice, which should be purged with an inert gas. DSR 6434 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of DSR 6434 in these solvents is approximately 10 mg/ml.

Description

DSR 6434 is an agonist of toll-like receptor 7 (TLR7).¹ It induces reporter gene activity in HEK293 cells expressing human TLR7 (EC₅₀ = 7.9 nM) but not HEK293 cells expressing human TLR8 or TLR9. DSR 6434 (0.64-2,000 nM) induces production of chemokine (C-X-C motif) ligand 10 (CXCL10), IL-12p70, IFN-γ, and TNF-α in splenocytes isolated from *Tlr7* wild-type, but not *Tlr7*^{-/-}, mice. *In vivo*, DSR 6434 (0.1 mg/kg) reduces tumor volume and increases survival, as well as potentiates the antitumor effects of ionizing radiation, in a CT26 murine colon cancer model. It also potentiates the antitumor effects of ionizing radiation and decreases the number of metastases in a KHT murine fibrosarcoma model.

References

1. Adlard, A.L., Dovedi, S.J., Telfer, B.A., *et al.* A novel systemically administered Toll-like receptor 7 agonist potentiates the effect of ionizing radiation in murine solid tumor models. *Int. J. Cancer* **135**(4), 820-829 (2014).

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.

WARRANTY AND LIMITATION OF REMEDY
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