

PRODUCT INFORMATION



Rilpivirine-d₆ (hydrochloride) Item No. 26520

Formal Name: 4-[[4-[[4-[(1E)-2-cyanoethenyl]-2,6-di(methyl-d₃)phenyl]amino]-2-pyrimidinyl]amino]-benzonitrile, monohydrochloride

MF: C₂₂H₁₂D₆N₆ • HCl

FW: 408.9

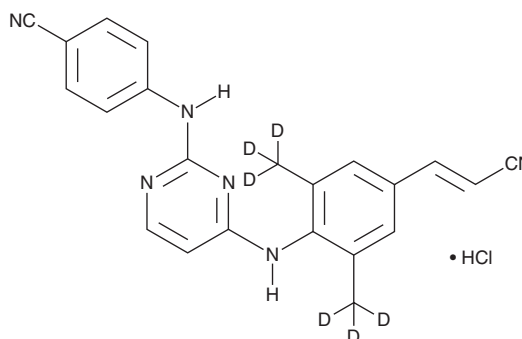
Chemical Purity: ≥95% (Rilpivirine)

Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤1% d₀

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

Rilpivirine-d₆ (hydrochloride) is intended for use as an internal standard for the quantification of rilpivirine (Item No. 21559) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Rilpivirine-d₆ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the rilpivirine-d₆ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Rilpivirine-d₆ (hydrochloride) is soluble in the organic solvent DMSO.

Description

Rilpivirine is a non-nucleoside reverse transcriptase inhibitor (NNRTI) that inhibits growth of wild-type HIV with an EC₅₀ value of 0.51 nM.¹ It is active against NNRTI-resistant HIV strains with EC₅₀ values of less than 1 nM for L100I, K103N, V106A, G190A, and G190S mutants *in vitro*. Rilpivirine also reduces growth of greater than 80% of 1,500 NNRTI-resistant clinical isolates (EC₅₀s = <10 nM), including strains containing up to eight resistance mutations. *In vivo*, rilpivirine, when used in combination with cabotegravir, lamivudine (Item No. 18514), and abacavir, reduces the plasma viral titer in HIV-1 infected humanized mice.²

References

1. Garvey, L. and Winston, A. Rilpivirine: A novel non-nucleoside reverse transcriptase inhibitor. *Expert Opin. Drug Discov.* **18**(7), 1035-1041 (2009).
2. Arainga, M., Edagwa, B., Mosley, R.L., *et al.* A mature macrophage is a principal HIV-1 cellular reservoir in humanized mice after treatment with long acting antiretroviral therapy. *Retrovirology* **14**(1), 17 (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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