

Product Name	: Dolutegravir
Synonyms	: GSK1349572; GSK-1349572; GSK 1349572
Cat No.	: M10248
CAS Number	: 1051375-16-6
Molecular Formula	: C ₂₀ H ₁₉ F ₂ N ₃ O ₅
Formula Weight	: 419.38
Chemical Name	: 2H-Pyrido[1',2':4,5]pyrazino[2,1-b][1,3]oxazine-9-carboxamide, N-[(2,4-difluorophenyl)methyl]-3,4,6,8,12,12a-hexahydro-7-hydroxy-4-methyl-6,8-dioxo-, (4R,12aS)-
Description	Dolutegravir (GSK1349572) is a potent, next-generation HIV integrase (IN) inhibitor, inhibits HIV-1 integrase-catalyzed strand transfer with IC₅₀ of 2.7 nM; inhibits HIV-1 replication in PBMCs, MT-4 cells and in the PHIV assay with EC₅₀ of 0.51, 0.71 and 2.2 nM, respectively; demonstrates activity against site-directed molecular clones containing the raltegravir-resistant signature mutations Y143R, Q148K, N155H, and G140S/Q148H; exhibits excellent anti-HIV activity in combination with representative approved antiretroviral agents in vivo. HIV Infection Approved
Pathway	: Microbiology/Virology
Target	: HIV
Receptor	: HIV integrase
Solubility	: DMSO: 10 mg/mL
SMILES	: <chem>[H][C@]12CN3C=C(C(=O)NCC4=C(F)C=C(F)C=C4)C(=O)C(O)=C3C(=O)N1[C@H](C)CCO2</chem> r,c:10,16,22,t:4,13
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Kobayashi M, et al. Antimicrob Agents Chemother. 2011 Feb;55(2):813-21. | 2. Garrido C, et al. Antiviral Res. 2011 Jun;90(3):164-7. | 3. Hightower KE, et al. Antimicrob Agents Chemother. 2011 Oct;55(10):4552-9. | 4. Hare S, et al. Mol Pharmacol. 2011 Oct;80(4):565-72.