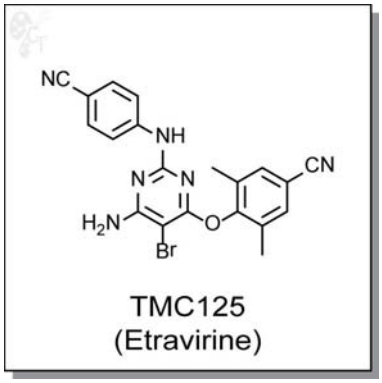
Cellagen Technology

Product Specification Sheet

Product Name: TMC125 (Etravirine)

Catalog Number: C8125



Technical information:

Chemical Formula:	$C_{20}H_{15}BrN_6O$
CAS #:	269055-15-4
Molecular Weight:	435.28
Purity:	> 98%
Appearance:	white solid
Solubility:	Soluble in DMSO up to 50 mM
Chemical Name:	4-((6-amino-5-bromo-2-((4-cyanophenyl)amino)pyrimidin-4-yl)oxy)-3,5-dimethylbenzonitrile
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
Shelf Life:	In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

Handling:

- To make 10 mM stock solution, add 0.23mL of DMSO for each mg of TMC125 (Etravirine).
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity:

TMC125 is a nonnucleoside reverse transcriptase inhibitor with an EC50 of 1.4 to 4.3 nM for wild-type HIV-1. Additionally, TMC125 is highly potent against a wide range of single-mutant and double-mutant NNRTI-resistant HIV-1 strains, including L100I, K103N, Y181C, and L100I+K103N, at EC50s of 3, 1, 7, and 19 nM, respectively. (1)

TMC125 is believed to have a high barrier to development of resistance in vitro based on multiplicity of infection experiments which confirm a profile distinct from other reverse transcriptase inhibitors. (2)

Reference:

1. Andries et al., TMC125, a Novel Next-Generation Nonnucleoside Reverse Transcriptase Inhibitor Active against Nonnucleoside Reverse Transcriptase Inhibitor-Resistant Human Immunodeficiency Virus Type 1. Antimicrob. Agents Chemother. 2004, 48(12), 4680-4686. Pubmed ID: 15561844

2. Vingerhoets et al., TMC125 Displays a High Genetic Barrier to the Development of Resistance: Evidence from In Vitro Selection Experiments. J. Virol. 2005, 79(20), 12773-12782. Pubmed ID: 16188980

To reorder: http://www.cellagentech.com/TMC125-Etravirine/

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.