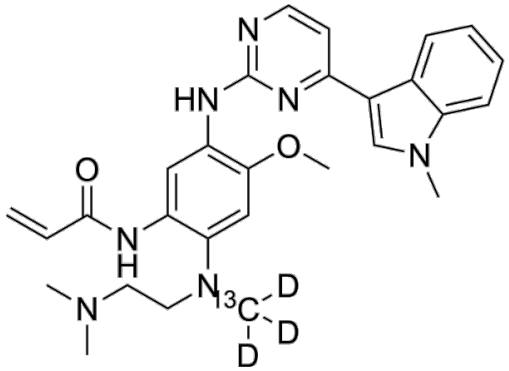
Product Data Sheet

Product Name: Osimertinib-13C,d3
Cat. No.: GC73757

Chemical Properties

Cas. No.	2254100-49-5		
Formula	$C_{27}{}^{13}CH_{30}D_3N_7O_2$	M.Wt	503.62
Solubility		Storage	4°C, protect from light, stored under nitrogen
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

Osimertinib-13C,d3 is the deuterium and 13C labeled Osimertinib. Osimertinib (AZD9291) is a covalent, orally active, irreversible, and mutant-selective EGFR inhibitor with an apparent IC50 of 12 nM against L858R and 1 nM against L858R/T790M, respectively.

Stable heavy isotopes of drogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of

drugs[1].

References:
[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.
[2]. Cross DA, et al. AZD9291, an irreversible EGFR TKI, overcomes T790M-mediated resistance to EGFR inhibitors in lung cancer. Cancer Discov. 2014 Sep;4(9):1046-61.;Hirano T, et al. Pharmacological and Structural Characterizations of Naquotinib, a Novel Third