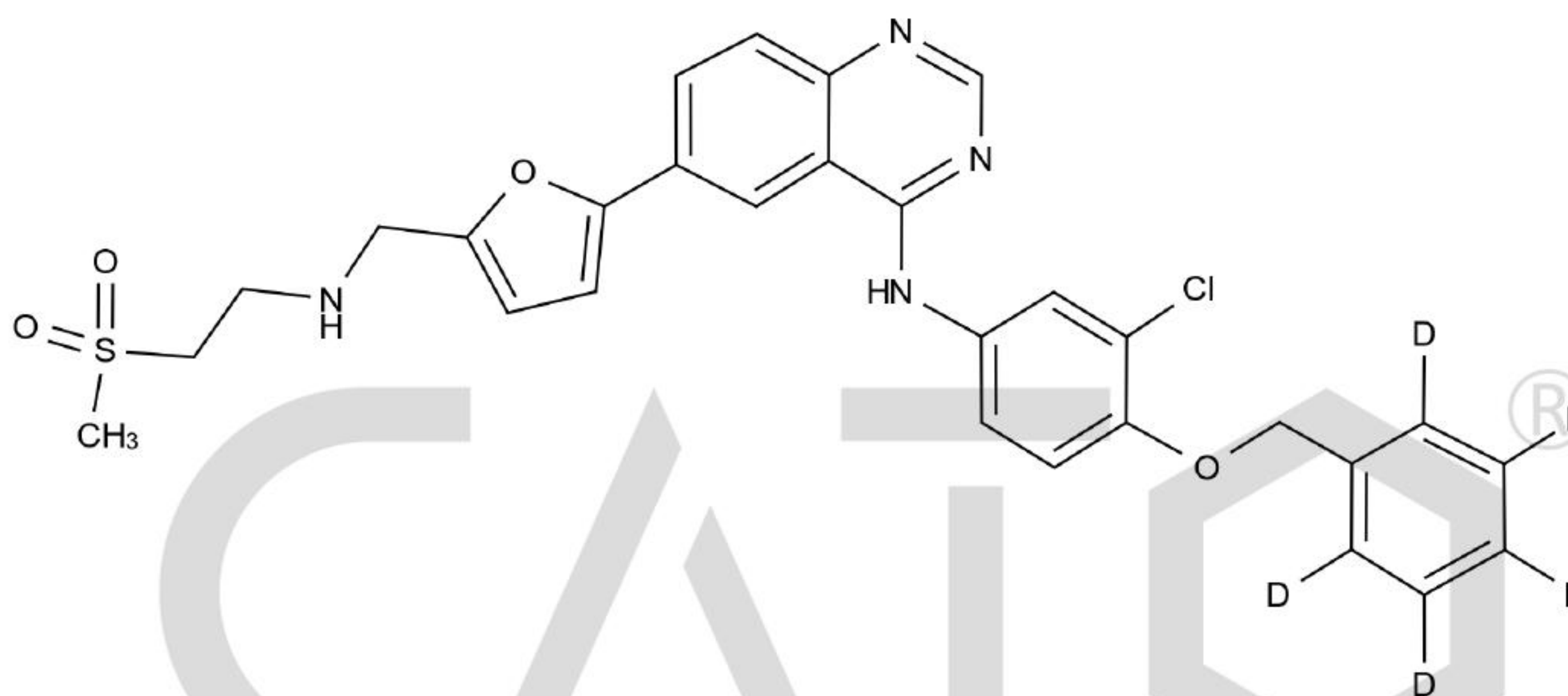


Certificate of Analysis

Reference Material & Standard

Product Name:	Lapatinib-d4	Catalogue Number:	CCAD304304
Synonyms:	N/A	Lot Number:	0805-RG-0072
CAS Number:	1184264-15-0	Expiry Date:	Jun 11, 2027
Molecular Formula:	C ₂₉ H ₂₂ D ₄ ClFN ₄ O ₄ S	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	585.08	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Identification	LCMS&IR&HNMR	Confirmed
Purity	HPLC	98.7108%
Water Content	Karl Fischer	0.40%
Residual Solvents	NMR	1.4% isopropyl ether
Assay		96.9%
Uncertainty		±0.5%

Comment:

1. The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$\text{Assay (\%)} = (100\% - \text{Water Content} - \text{Residual Solvents}) * \text{Purity HPLC (\%)} / 100\%$

Water Content and Residual Solvents are considered as absolute effect, HPLC purity is considered as relative effect.

2. The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Lisa

Reviewed by:

Hinlam

Approved by General Manager:

David

Date: Aug 07, 2025

Date: Aug 08, 2025

Date: Aug 08, 2025

