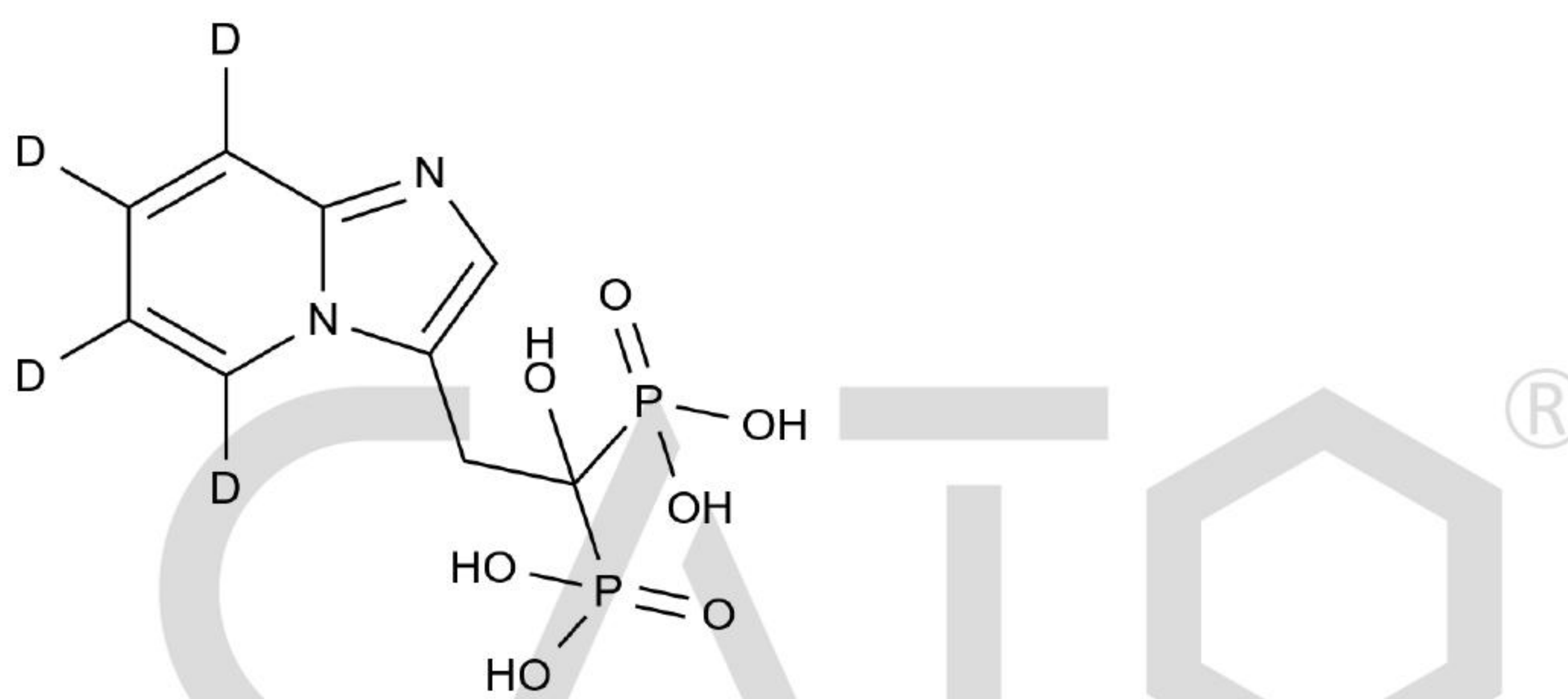


Certificate of Analysis

Reference Material & Standard

Product Name:	Minodronic acid-d4	Catalogue Number:	C1414198
Synonyms:	N/A	Lot Number:	0715-RF-0007
CAS Number:	1807367-80-1	Expiry Date:	Mar 01, 2026
Molecular Formula:	C ₉ H ₈ D ₄ N ₂ O ₇ P ₂	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	326.17	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Off-White Solid
Identification	LCMS&IR&HNMR	Confirmed
Chemical Purity	HPLC	99.8%
Isotopic Purity		98.8%
Assay	qNMR	90.3%
Uncertainty		±2.0%

Comment:

1. Assay was determined by quantitative ¹H-NMR.
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: Jul 17, 2024

Date: Jul 17, 2024

Date: Jul 17, 2024

