Certificate of Analysis

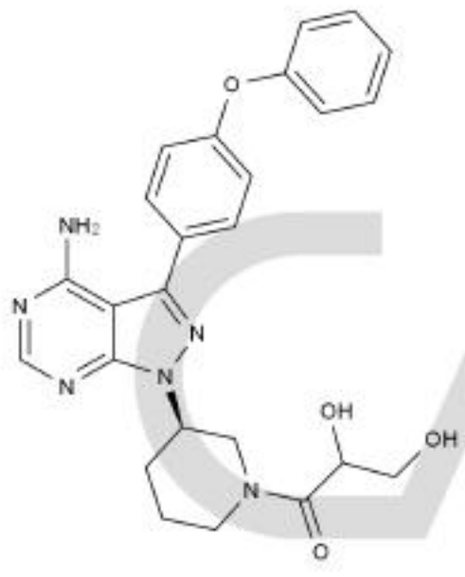
Reference Material & Standard

Product Name:	Ibrutinib Impurity 13 (Mixture of Diastereomers)	**Catalogue Number:**	C4X-106413
Synonyms:	N/A	**Lot Number:**	0219-SA-7364
CAS Number:	1654820-87-7	**Expiry Date:**	Feb 18, 28
Molecular Formula:	$C_{25}H_{26}N_6O_4$	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	474.51		

Warning:



Chemical Structure:



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Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Identification:	LC&HNMR	Confirmed
Purity:	HPLC	96.712%

Signature:

Prepared by: Lisa Date: Feb 19, 24

Reviewed by: Yuki Date: Feb 19, 24

Approved by General Manager: David Date: Feb 19, 24

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Directions:

1. Intended use: This product is suitable for identification and quantification of the analyte(s), instrument calibration, method development and quality control in analytical and R&D applications. It is not intended for administration to humans or animals, and shall not be used to diagnose, treat or cure any diseases.

2. Minimum sample size: 1mg is recommended as the minimum sample size.

3. Metrological traceability: This product meets the requirements of ISO 17034 and is traceable to NMI through an unbroken chain of comparisons.

4. Instructions for handling and correct use: Handling in a well-ventilated place.

Document Version:

Revision No.	Date	Reason for Revision
01	Feb 19, 24	First release.

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