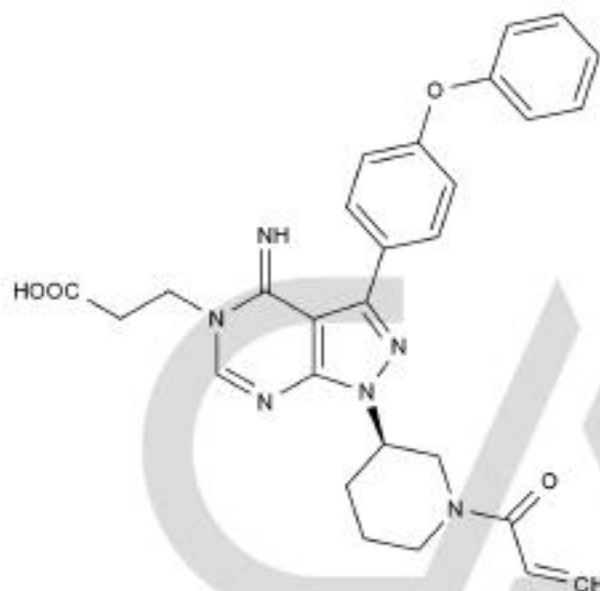


# Certificate of Analysis

## Reference Material & Standard

|                    |                                                               |                   |                                           |
|--------------------|---------------------------------------------------------------|-------------------|-------------------------------------------|
| Product Name:      | Ibrutinib Impurity 17                                         | Catalogue Number: | C4X-106417                                |
| Synonyms:          | N/A                                                           | Lot Number:       | 0923-SA-7896                              |
| CAS Number:        | N/A                                                           | Expiry Date:      | Sep 23, 26                                |
| Molecular Formula: | C <sub>28</sub> H <sub>28</sub> N <sub>6</sub> O <sub>4</sub> | Storage:          | -20°C±5°C Protected from light and Sealed |
| Molecular Weight:  | 512.56                                                        |                   |                                           |

Chemical Structure:



| Test Items      | Method            | Results   |
|-----------------|-------------------|-----------|
| Appearance      | Visual inspection | Solid     |
| Identification: | LC&HNMR           | Confirmed |
| Purity:         | HPLC              | 96.773%   |

Signature:

Prepared by:

*Lisa*

Reviewed by:

*Yuki*

Approved by General Manager:

*David*

Date: Sep 23, 25

Date: Sep 23, 25

Date: Sep 23, 25



Add: 3rd Floor, Building B, No.179, Guangpu Rd East, Huangpu District, Guangzhou, China

Tel: +86-20-81960175

Email: supports@cato-chem.com

Web: <https://www.cato-chem.com>

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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           | Sep 23, 25 | First release.      |

