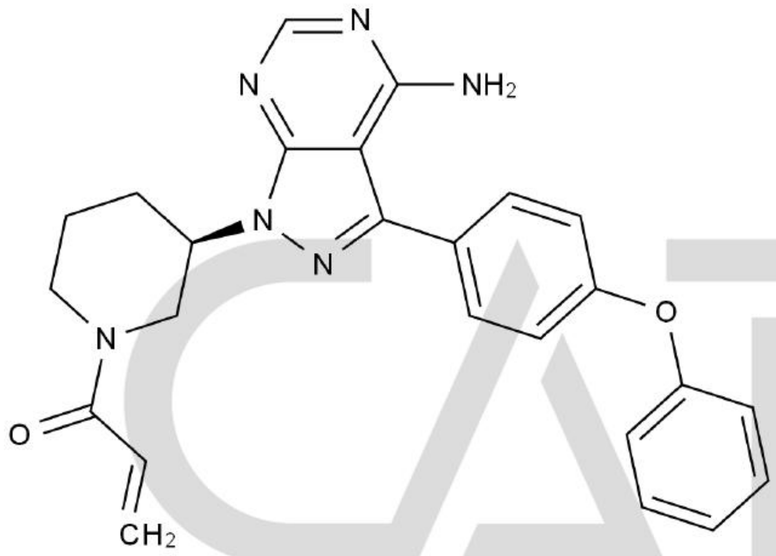
Certificate of Analysis

Reference Material & Standard

Product Name:	Ibrutinib	**Catalogue Number:**	C4X-1064
Synonyms:	N/A	**Lot Number:**	0702-RF-0044
CAS Number:	936563-96-1	**Expiry Date:**	Sep 10, 2030
Molecular Formula:	$C_{25}H_{24}N_6O_2$	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	440.50	**Shipping Condition:**	Shipping at Room Temperature
		Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&IR&UV&CNMR&HNMR	Confirmed
Purity	HPLC	99.711%
Residue on Ignition	Muffle Furnace	0.07%
Loss on Drying	TGA	0.0511%
Specific Rotation		[α]D25.0(c=0.01,DMSO): -126.9°
Assay		99.6%

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Comment:

The calculation of the mass balance method follows the formula (calculated on the non-dried basis):
*Assay (%) = (100%-Residue on Ignition-Loss on Drying) * Purity HPLC (%) /100%*
Residue on Ignition and Loss on Drying are considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by: Koi Date: Sep 11, 2026

Reviewed by: Lisa Date: Sep 11, 2026

Approved by General Manager: David Date: Sep 11, 2026

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