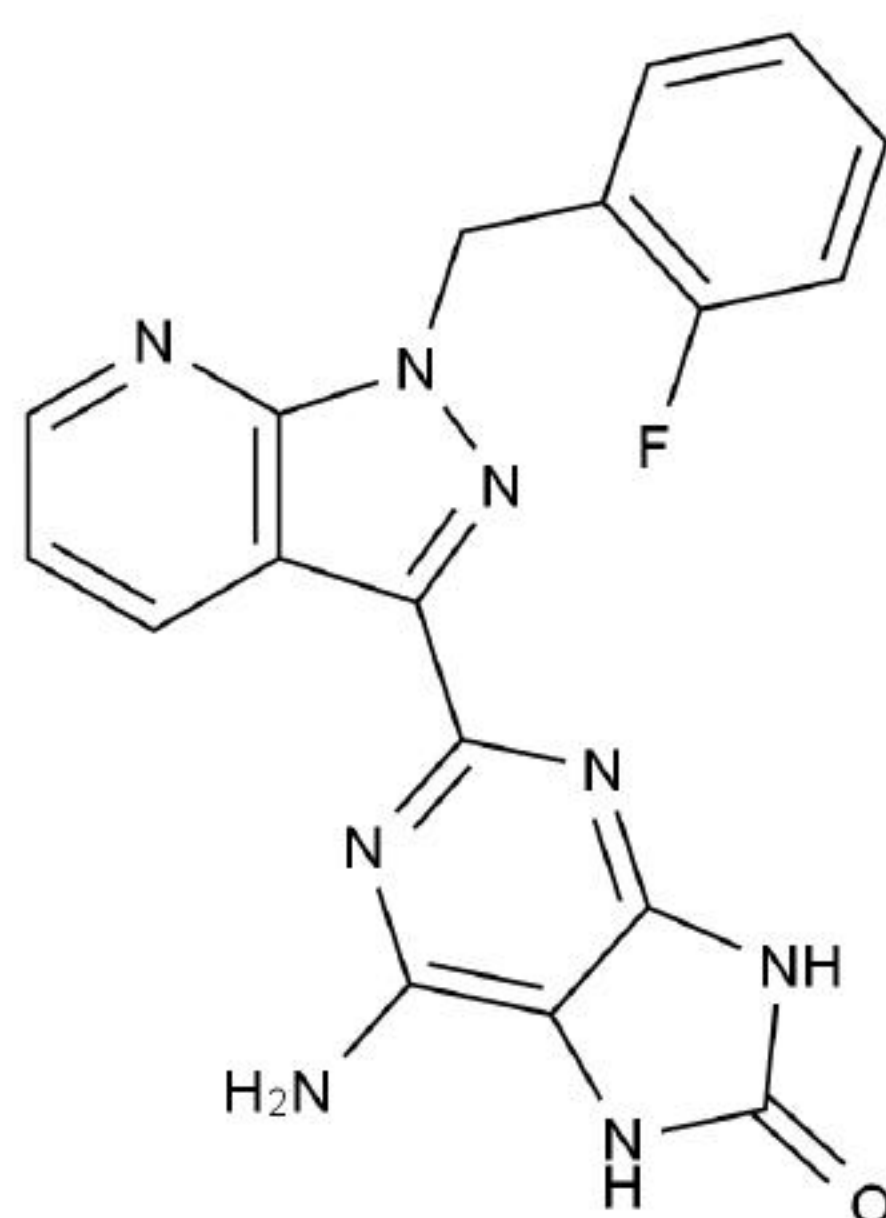


Certificate of Analysis

Reference Material & Standard

Product Name:	Riociguat Impurity 2	Catalogue Number:	C4X-17492
Synonyms:	N/A	Lot Number:	1024-RE-0047
CAS Number:	1361569-10-9	Expiry Date:	May 28, 2026
Molecular Formula:	C ₁₈ H ₁₃ FN ₈ O	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	376.35		
Chemical Structure:			



Test Items	Method	Results
Appearance	Visual inspection	Brown Solid
Identification	LCMS&UV&HNMR	Confirmed
Purity	HPLC	97.274%
Water Content	Karl Fischer	0.12%
Residual Solvents	NMR	Not detected in NMR
Assay		97.2%

Comment:

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

Assay (%) = (100% - Water Content - Residual Solvents) * Purity HPLC (%) / 100%

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

Signature:

Prepared by:

Lily

Reviewed by:

Hinlam

Aporoved by General Manager:

David

Date: Nov 01, 2023

Date: Nov 01, 2023

Date: Nov 01, 2023

