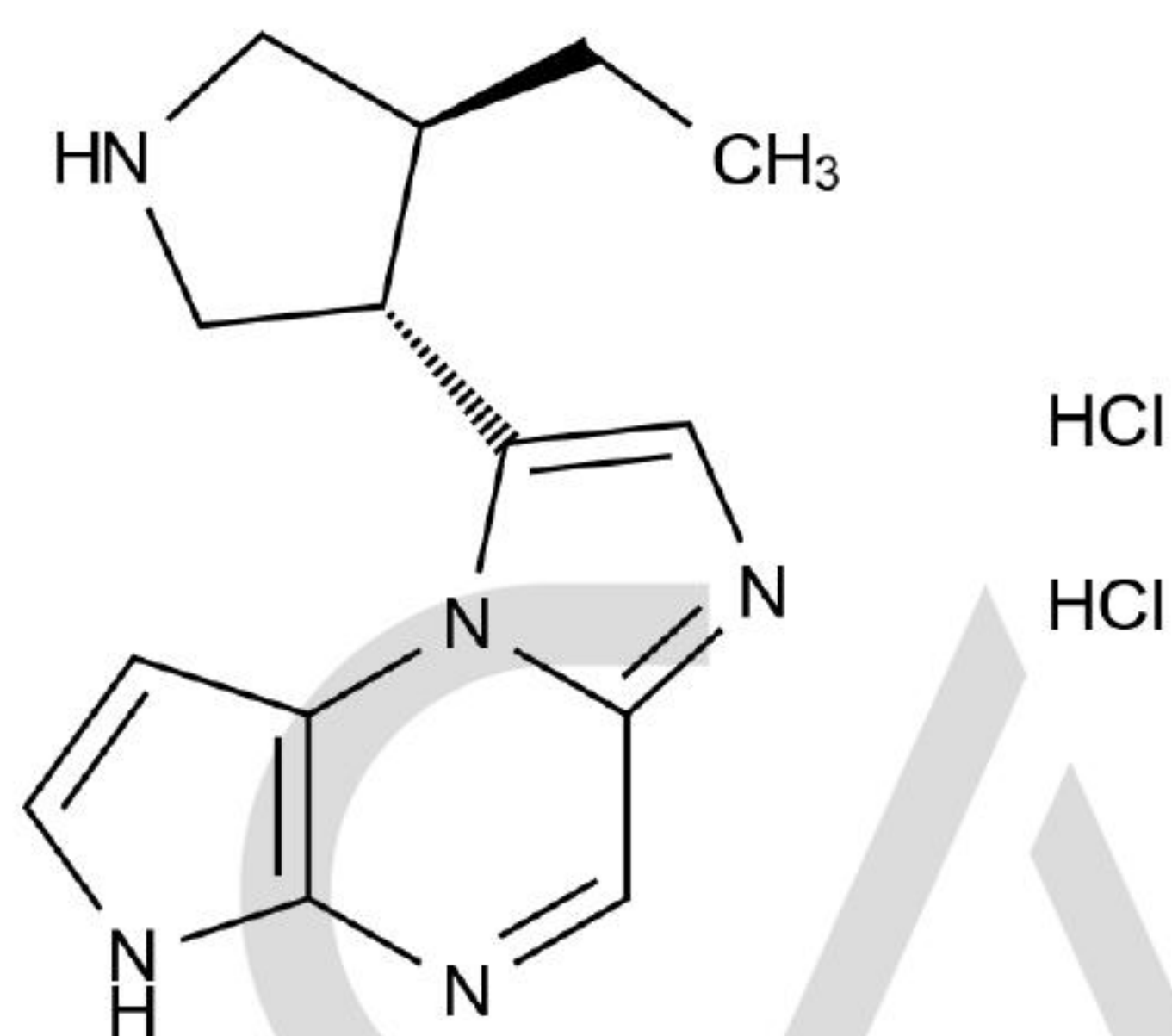


Certificate of Analysis

Reference Material & Standard

Product Name:	Upadacitinib Impurity 52 2HCl	Catalogue Number:	C4X-240552
Synonyms:	N/A	Lot Number:	1208-RE-0006
CAS Number:	N/A	Expiry Date:	Dec 04, 2026
Molecular Formula:	C ₁₄ H ₁₇ N ₅ 2*HCl	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	255.32 2*36.46	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Pale Yellow Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	98.19%
Loss On Drying	TGA	4.5182%
Assay		93.8%

Comment:

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

Assay (%) = (100% - Loss On Drying) * Purity HPLC (%) / 100%

Loss On Drying is considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Lily

Reviewed by:

Hinlam

Aproved by General Manager:

David

Date: Dec 11, 2023

Date: Dec 12, 2023

Date: Dec 12, 2023

