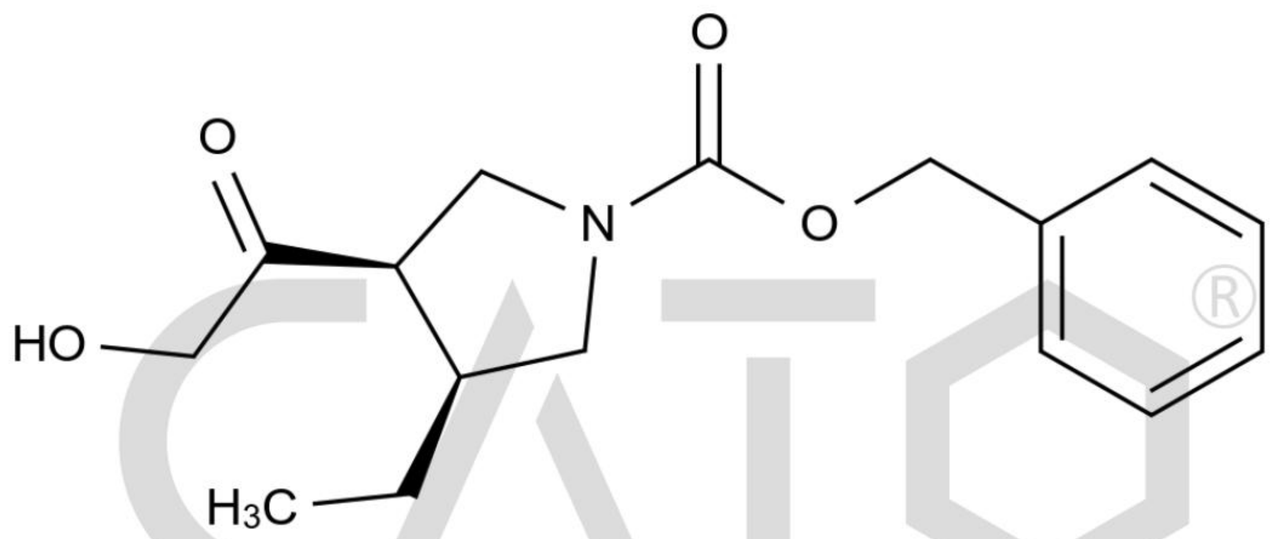
Certificate of Analysis

Reference Material & Standard

Product Name:	Upadacitinib Impurity 74	**Catalogue Number:**	C4X-240574
Synonyms:	N/A	**Lot Number:**	1016-RH-0015
CAS Number:	2650489-63-5	**Expiry Date:**	Sep 23, 2028
Molecular Formula:	$C_{16}H_{21}NO_4$	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	291.34	**Shipping Condition:**	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&UV&HNMR	Confirmed
Purity	HPLC	96.198%
Water Content	Karl Fischer	0.02%
Residual Solvents	NMR	0.42% ethyl acetate and 0.68% dichloromethane
Assay	Mass Balance	95.1%

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Comment:

The calculation of the mass balance 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: Date: Oct 22, 2026

Reviewed by: Date: Oct 22, 2026

Approved by General Manager: Date: Oct 22, 2026

CATO Research Chemicals Inc.