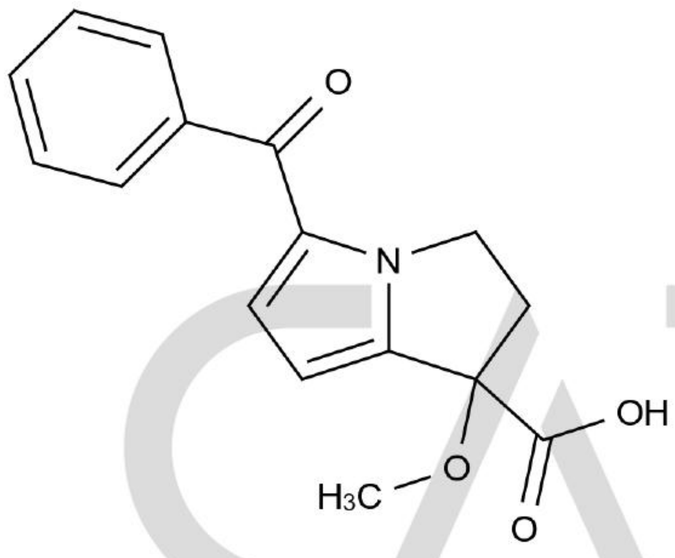
Certificate of Analysis

Reference Material & Standard

Product Name:	Ketorolac EP Impurity D	**Catalogue Number:**	C4X-166935
Synonyms:	N/A	**Lot Number:**	1213-RF-0032
CAS Number:	1391053-45-4	**Expiry Date:**	Dec 12, 2027
Molecular Formula:	$C_{16}H_{15}NO_4$	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	285.29	**Shipping Condition:**	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Brown Solid
Identification	LCMS&IR&UV&CNMR&HNMR	Confirmed
Purity	HPLC	99.1%
Assay	qNMR	93.1%

CATO Research Chemicals Inc.

Signature:

Prepared by: Koji Date: Oct 21, 2026

Reviewed by: Lisa Date: Oct 21, 2026

Approved by General Manager: David Date: Oct 21, 2026

CATO Research Chemicals Inc.