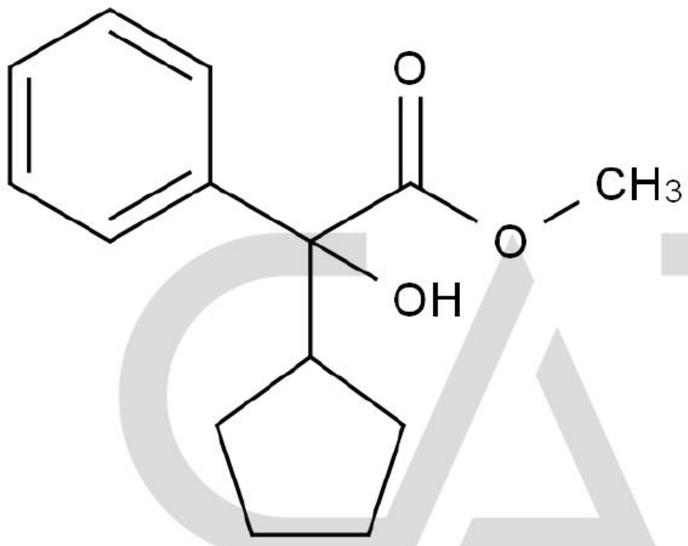
Certificate of Analysis

Reference Material & Standard

Product Name:	Glycopyrronium Bromide EP Impurity L	**Catalogue Number:**	C4X-14312
Synonyms:	N/A	**Lot Number:**	1029-RH-0097
CAS Number:	19833-96-6	**Expiry Date:**	Nov 04, 2030
Molecular Formula:	$C_{14}H_{18}O_3$	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	234.29	**Shipping Condition:**	Shipping at Room Temperature
Solubility:	Acetonitrile	**Warning:**	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Colorless Liquid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	100.000%
Loss on Drying	TGA	1.0152%
Assay	Mass Balance	99.0%

CATO Research Chemicals Inc.

Comment:

The calculation of the mass balance 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: Alice — Date: Nov 05, 2026

Reviewed by: Koi — Date: Nov 05, 2026

Approved by General Manager: David — Date: Nov 05, 2026

CATO Research Chemicals Inc.