

Certificate of Analysis

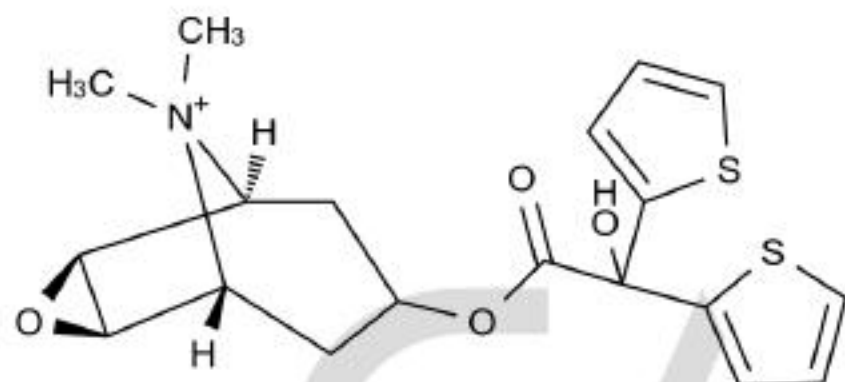
Reference Material & Standard

Product Name:	(1A,2A,4A,5A,7A)-7-[(Hydroxydi-2-thienylacetyl)oxy]-9,9-dimethyl-3-oxa-9-azoniatricyclo[3.3.1.0 ^{2,4}]nonane bromide (1a,2,4,5a,7)-7-[(2-Hydroxy-2,2-di-2-thienylacetyl)oxy]-9,9-dimethyl-3-oxa-9-azoniatricyclo[3.3.1.0 ^{2,4}]nonane bromide 186691-13-4 7-[(Hydroxybis(2-thienyl)acetyl)oxy]-9,9-dimethyl-3-oxa-9-azoniatricyclo[3.3.1.0 ^{2,4}]nonane bromide 7-[(hydroxy(dithiophen-2-yl)acetyl)oxy]-9,9-dimethyl-3-oxa-9-azoniatricyclo[3.3.1.0 ^{2,4}]nonane bromide BA 679 BR BA 679BR BA-679 BR BA-679-BR D0P1WA Spiriva Spiriva (TN) Spiriva Handihaler Spiriva Respimat TIOTROPIUM BROMIDE Tiotropium Tiotropium bromide [USAN:INN]	Catalogue Number:	C1432335
Synonyms:	N/A	Lot Number:	0211-SA-7720
CAS Number:	186691-13-4	Expiry Date:	Feb 10, 28
Molecular Formula:	C ₁₉ H ₂₂ NO ₄ S ₂	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	392.51		

Warning:



Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Solid
Identification:	LC&HNMR	Confirmed
Purity:	HPLC	97.446%

Signature:

Prepared by:

Lisa

Reviewed by:

Yuki

Approved by General Manager:

David

Date: Feb 11, 24

Date: Feb 11, 24

Date: Feb 11, 24



Add: 3rd Floor, Building B, No.179, Guangpu Rd East, Huangpu District, Guangzhou, China

Tel: +86-20-81960175

Email: supports@cato-chem.com

Web: <https://www.cato-chem.com>

Page 1 of 6



Official WeChat

Directions:

1. *Intended use: This product is suitable for identification and quantification of the analyte(s), instrument calibration, method development and quality control in analytical and R&D applications. It is not intended for administration to humans or animals, and shall not be used to diagnose, treat or cure any diseases.*
2. *Minimum sample size: 1mg is recommended as the minimum sample size.*
3. *Metrological traceability: This product meets the requirements of ISO 17034 and is traceable to NMI through an unbroken chain of comparisons.*
4. *Instructions for handling and correct use: Handling in a well-ventilated place.*

Document Version:

Revision No.	Date	Reason for Revision
01	Feb 11, 24	First release.

