

CERTIFICATE of ANALYSIS



Umeclidinium (bromide)

4-(hydroxydiphenylmethyl)-1-[2-(phenylmethoxy)ethyl]-1-azoniabicyclo[2.2.2]octane, monobromide

Item No. 20700 * Batch No. 0532995

Purity Specification: $\geq 98\%$

Molecular formula: $C_{29}H_{34}NO_2 \cdot Br$

CAS number: 869113-09-7

Formula weight: 508.50

Expiration date: 16MAR2029

Overview

Tests

Results

HPLC	Purity: 100.0 %
IR	Conforms
Mass Spec	M-Br: 428.5
Melting point	236 - 239 °C
TLC	Purity: 100 %
UV	λ max: 206.00 nm
NMR	Conforms

Reviewed and approved by: Shan-Mei Chiu

WARNING

THIS PRODUCT IS FOR RESEARCH USE - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE. IT IS THE RESPONSIBILITY OF THE PURCHASER TO DETERMINE SUITABILITY FOR OTHER APPLICATIONS.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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