

CERTIFICATE of ANALYSIS



N-Propionitrile Chlorphine-13C3 (hydrochloride)

3-(3-(1-(1-(4-chlorophenyl)ethyl)piperidin-4-yl)-2-oxo-2,3-dihydro-1H-benzo[d]imidazol-1-yl)propanenitrile-1,2,3-13C3, monohydrochloride

Item No. 45648 * Batch No. 0824124

Purity Specification: $\geq 98\%$

Molecular formula: $C_{20}[^{13}C]_3H_{25}ClN_4O \cdot HCl$

CAS number: Formula weight: 448.40

Expiration date: 05JUL2030

Overview

Tests

Results

HPLC	Purity: 99.6 %
Mass Spec	M+H: 412.2
NMR	Conforms
Counterion	Conforms

Reviewed and approved by: Ryan Seiffert

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/12/2018

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM