

CERTIFICATE of ANALYSIS



para-fluoro Valeryl fentanyl (hydrochloride)

N-(4-fluorophenyl)-N-(1-phenethylpiperidin-4-yl)pentanamide monohydrochloride

Item No. 23085 • Batch No. 0538559

Purity Specification: $\geq 98\%$

Molecular Formula : C₂₄H₃₁FN₂O • HCl

CAS Number: (unspecified)

Formula Weight : 419

Expiry date: 12/5/2020

Tests	Results
-------	---------

HPLC	Purity: 100.0 %
------	-----------------

IR	Conforms
----	----------

Mass spec	M-HCl: 383.2
-----------	--------------

Melting Point	199 - 200 °C
---------------	--------------

TLC	Purity: 100 %
-----	---------------

NMR	Conforms
-----	----------

Reviewed and approved by: Shan-Mei Chiu

A handwritten signature in black ink, appearing to read "Shiu", written over a horizontal line.

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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