

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

## SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



# PRODUCT INFORMATION



## ML-162

Item No. 20455

CAS Registry No.: 1035072-16-2 Formal Name: a-[(2-chloroacetyl)

> (3-chloro-4-methoxyphenyl) amino]-N-(2-phenylethyl)-2-

thiopheneacetamide

MF:  $C_{23}H_{22}CI_2N_2O_3S$ 

FW: 477.4 ≥95% **Purity:** UV/Vis.:  $\lambda_{max}$ : 279 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



ML-162 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-162 in the solvent of choice, which should be purged with an inert gas. ML-162 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of ML-162 in these solvents is approximately 1, 25, and 10 mg/ml, respectively.

ML-162 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-162 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ML-162 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

ML-162 is an inhibitor of glutathione peroxidase 4 (GPX4).<sup>1</sup> It decreases GPX4 levels in MDA-MB-231 breast cancer cells, as well as the viability of BT-549 breast cancer cells, an effect that is enhanced by α-eleostearic acid (9(Z),11(E),13(E)-octadecatrienoic acid; Item No. 10008349). ML-162 is also selectively lethal to mutant RAS oncogene-expressing cells (IC $_{50}$ s = 25 and 578 nM for HRAS $^{G12V}$ -expressing and wild-type RAS-expressing BJeH cells, respectively).<sup>2</sup>

#### References

- 1. Beatty, A., Singh, T., Tyurina, Y.Y., et al. Ferroptotic cell death triggered by conjugated linolenic acids is mediated by ACSL1. Nat. Commun. 12(1), 2244 (2021).
- 2. Weïwer, M., Bittker, J.A., Lewis, T.A., et al. Development of small-molecule probes that selectively kill cells induced to express mutant RAS. Bioorg. Med. Chem. Lett. 22(4), 1822-1826 (2012).

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

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

uyer 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, 12/13/2022

#### **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