

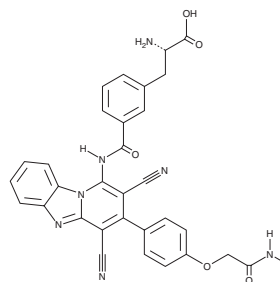
PRODUCT INFORMATION



KMH-233

Item No. 31032

CAS Registry No.: 1941174-13-5
Formal Name: 3-[[[2,4-dicyano-3-[4-[2-(methylamino)-2-oxoethoxy]phenyl]pyrido[1,2-a]benzimidazol-1-yl]amino]carbonyl]-L-phenylalanine
MF: C₃₂H₂₅N₇O₅
FW: 587.6
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

KMH-233 is supplied as a solid. A stock solution may be made by dissolving the KMH-233 in the solvent of choice, which should be purged with an inert gas. KMH-233 is slightly soluble (0.1-1 mg/ml) in acetonitrile and water. We do not recommend storing the aqueous solution for more than one day.

Description

KMH-233 is an inhibitor of L-type amino acid transporter 1 (LAT1; IC₅₀ = 18.2 μM).¹ It is selective for LAT1 over LAT2 (IC₅₀ = >1,000 μM). KMH-233 (25 and 100 μM) reduces the viability of MCF-7 cells and enhances cell death induced by bestatin (Item Nos. 21217 | 70520) or cisplatin (Item No. 13119) in the same cells. It also reduces mTOR and NF-κB levels and induces apoptosis in MCF-7 cells when used at a concentration of 100 μM.²

References

1. Huttunen, K.M., Gynther, M., Huttunen, J., *et al.* A selective and slowly reversible inhibitor of L-type amino acid transporter 1 (LAT1) potentiates antiproliferative drug efficacy in cancer cells. *J. Med. Chem.* **59(12)**, 5740-5751 (2016).
2. Markowicz-Piasecka, M., Huttunen, J., Montaser, A., *et al.* Hemocompatible LAT1-inhibitor can induce apoptosis in cancer cells without affecting brain amino acid homeostasis. *Apoptosis* **25(5-6)**, 426-440 (2020).

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.

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