

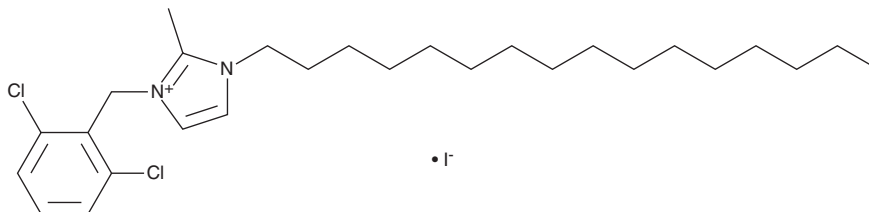
PRODUCT INFORMATION



Aldometanib (Iodide)

Item No. 45750

CAS Registry No.: 2904601-67-6
Formal Name: 3-[(2,6-dichlorophenyl)methyl]-1-hexadecyl-2-methyl-1H-imidazolium, monoiodide
Synonym: LXY-05-029
MF: $C_{27}H_{43}Cl_2N_2 \cdot I$
FW: 593.5
Purity: $\geq 98\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

Aldometanib (iodide) is supplied as a solid. A stock solution may be made by dissolving the aldometanib (iodide) in the solvent of choice, which should be purged with an inert gas. Aldometanib (iodide) is soluble (≥ 10 mg/ml) in ethanol and DMSO.

Description

Aldometanib is an inhibitor of aldolase ($IC_{50} = \sim 15$ nM for lysosome-bound aldolase) and an activator of AMP-activated protein kinase (AMPK).¹ It selectively activates lysosomal AMPK over cytosolic or mitochondrial AMPK at 5 nM. Aldometanib (50 μ M) inhibits ferroptosis in H9c2 cardiomyocytes in an *in vitro* model of myocardial ischemia-reperfusion injury.² It decreases blood glucose levels in lean mice, decreases blood glucose levels, fat mass, and hepatic lipid accumulation in high-fat diet-induced obese mice, and increases lifespan and healthspan in aged mice.¹ Aldometanib (5 mg/kg) inhibits glycolysis, increases survival, and decreases disease progression in a mouse model of amyotrophic lateral sclerosis (ALS).³ It increases intratumoral CD8⁺ T cell infiltration in models of hepatocellular carcinoma (HCC) using immunocompetent but not immunodeficient mice.⁴

References

1. Zhang, C.S., Li, M., Y., W., *et al.* The aldolase inhibitor aldometanib mimics glucose starvation to activate lysosomal AMPK. *Nat. Metab.* **4**(10), 1369-1401 (2022).
2. Xie, M., Hao, J., Chao, C., *et al.* Aldometanib attenuates OGD/R-induced cardiomyocyte injury via mitigation of mitochondrial dysfunction. *Tissue Cell* **99**, 103294 (2026).
3. Yan, K., Jiang, Y., Yong, Y., *et al.* ALDOA promotes glycolysis and NLRP3/GSDMD pyroptosis to accelerate ALS progression. *Ann. Clin. Transl. Neurol.* (2026).
4. Hu, H.H., Wang, X., Lan, B., *et al.* Glucose starvation mimetic aldometanib removes immune barriers permitting mice with hepatocellular carcinoma to live to normal ages. *Cell Res.* 934-953 (2025).

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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