

PRODUCT INFORMATION



LDH-IN-1

Item No. 44281

CAS Registry No.: 1964515-43-2
Formal Name: 2-[4-[[4-(aminosulfonyl)phenyl]methyl]-3-[1,1'-biphenyl]-3-yl]-5-(cyclopropylmethyl)-1H-pyrazol-1-yl]-4-thiazolecarboxylic acid

Synonyms: Lactate Dehydrogenase-IN-1, Lactate Dehydrogenase Inhibitor 1, LDH Inhibitor 1

MF: C₃₀H₂₆N₄O₄S₂

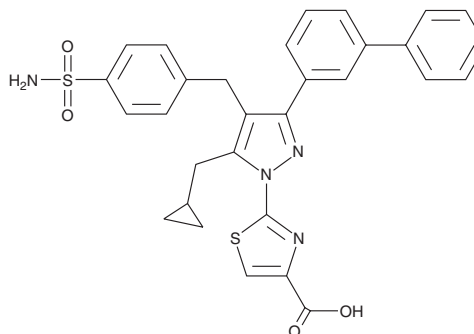
FW: 570.7

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

LDH-IN-1 is supplied as a solid. A stock solution may be made by dissolving the LDH-IN-1 in the solvent of choice, which should be purged with an inert gas. LDH-IN-1 is soluble (≥10 mg/ml) in DMSO.

Description

LDH-IN-1 is an inhibitor of lactate dehydrogenase A (LDHA) and LDHB (IC₅₀s = 0.032 and 0.027 μM, respectively).¹ It is selective for LDHA and LDHB over malate dehydrogenase (MDH) and isocitrate dehydrogenase 1 (IDH1; IC₅₀s = 37.8 and 29.8 μM, respectively). LDH-IN-1 is cytotoxic to A-673 sarcoma and MiaPaCa-2 pancreatic cancer cells (IC₅₀s = 2.9 and 3.96 μM, respectively). It decreases the extracellular acidification rate (ECAR) in A-673 cells when used at concentrations ranging from 2 to 10 μM.

Reference

1. Rai, G., Brimacombe, K.R., Mott, B.T., *et al.* Discovery and optimization of potent, cell-active pyrazole-based inhibitors of lactate dehydrogenase (LDH). *J. Med. Chem.* **60(22)**, 9184-9204 (2017).

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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