PRODUCT INFORMATION



CTPI-2

Item No. 36933

CAS Registry No.: 68003-38-3

Formal Name: 2-[[(4-chloro-3-nitrophenyl)

sulfonyl]amino]-benzoic acid

MF: $C_{13}H_9CIN_2O_6S$

FW: 356.7 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years NO₂

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

Laboratory Procedures

CTPI-2 is supplied as a solid. A stock solution may be made by dissolving the CTPI-2 in the solvent of choice, which should be purged with an inert gas. CTPI-2 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CTPI-2 in these solvents is approximately 5 and 2 mg/ml, respectively.

Description

CTPI-2 is an inhibitor of the mitochondrial citrate transporter, also known as SLC25A1.¹ It decreases the oxygen consumption rate (OCR) in tumor spheres isolated from patients with non-small cell lung cancer (NSCLC) and inhibits the invasion of lung cancer stem cells in vitro. CTPI-2 (50 μM) acts synergistically with cisplatin (Item No. 13119) to reduce the viability of cisplatin-resistant patient-derived NSCLC cells. It reverses increases in body weight, steatosis, and fasting blood glucose levels in a mouse model of high fat diet-induced non-alcoholic fatty liver disease (NAFLD) when administered at a dose of 50 mg/kg.²

References

- 1. Fernandez, H.R., Gadre, S.M., Tan, M., et al. The mitochondrial citrate carrier, SLC25A1, drives stemness and therapy resistance in non-small cell lung cancer. Cell Death Differ. 25(7), 1239-1258 (2018).
- 2. Tan, M., Mosaoa, R., Graham, G.T., et al. Inhibition of the mitochondrial citrate carrier, Slc25a1, reverts steatosis, glucose intolerance, and inflammation in preclinical models of NAFLD/NASH. Cell Death Differ. **27(7)**, 2143-2157 (2020).

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

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