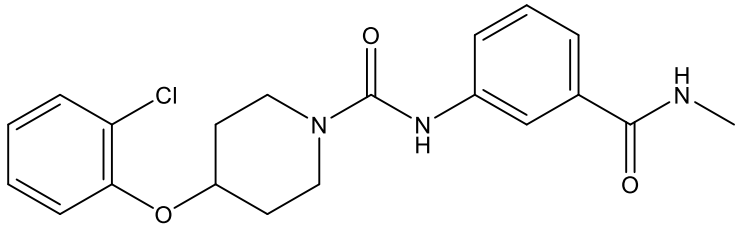
Catalog # 10-4639

A939572

CAS# 1032229-33-6

4-(2-Chlorophenoxy)-N-[3-(methylcarbamoyl)phenyl]piperidine-1-carboxamide

Lot # FBS3003



A939572 is a potent stearoyl-CoA desaturase 1 (SCD1) inhibitor (IC_{50}s = mouse: <4 nM, human: 37 nM).[1] Active in various cancer models alone and in combination with other chemotherapeutics.[2-6] A939572 was able to selectively eliminate human pluripotent stem cells (hPSCs) in the presence of progenitor and differentiated cells.[7]

1) Xin *et al*. (2008), *Discovery of piperidine-aryl urea-based stearoyl-CoA desaturase 1 inhibitors*; Bioorg. Med. Chem. Lett., **18** 4298
2) Von Roemeling *et al*. (2013), *Stearoyl-CoA desaturase 1 is a novel molecular therapeutic target for clear cell renal cell carcinoma*; Clin. Cancer Res., **19** 2368
3) Piao *et al*. (2019), *Inhibition of stearoyl CoA desaturase-1 activity suppresses tumour progression and improves prognosis in human bladder cancer*; J. Cell Mol. Med., **23** 2064
4) She *et al*. (2019), *SCD1 is required for EGFR-targeting cancer therapy of lung cancer via re-activation of EGFR/PI3K/AKT signals*; Cancer Cell Int., **19** 103
5) Skrypek *et al*. (2021), *Inhibition of Stearoyl-CoA Desaturase Induces the Unfolded Protein Response in Pancreatic Tumors and Suppresses Their Growth*; Pancreas, **50** 219
6) Hu *et al*. (2022), *Inhibition of Stearoyl-CoA Desaturase 1 Potentiates Anti-tumor Activity of Amodiaquine in Non-small Cell Lung Cancer*; Biol. Pharm. Bull., **45** 438
7) Ben-David *et al*. (2013), *Selective Elimination of Human Pluripotent Stem Cells by an Oleate Synthesis Inhibitor Discovered in a High-Throughput Screen*; Cell Stem Cell, **12** P167

PHYSICAL DATA

Molecular Weight:	387.86
Molecular Formula:	$C_{20}H_{22}ClN_3O_3$
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.
	Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

www.focusbiomolecules.com