

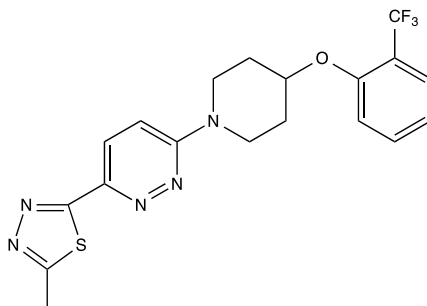
Catalog # 10-4558

MF-438

CAS# 921605-87-0

3-(5-Methyl-1,3,4-thiadiazol-2-yl)-6-{4-[2-(trifluoromethyl)phenoxy]piperidin-1-yl}pyridazine

Lot # FBA3097



MF-438 is a potent inhibitor of stearoyl-CoA desaturase 1 (SCD1) - IC₅₀ = 2.3 nM.¹ MF-438 was potent in an *in vivo* mouse liver PD assay (ED₅₀ between 1 and 3 mg/kg).¹ Cancer initiating cells (CSC-like) were shown to be much more sensitive to MF-438 inhibition of SCD1 than progenitor and terminally differentiated cancer cells in a lung cancer model.² MF-438 showed good oral bioavailability and metabolic stability making it an excellent tool for studying the effects of SCD1 in various disease models.

- 1) Leger et al., (2010), *Synthesis and biological activity of a potent and orally bioavailable SCD inhibitor (MF-438)*; *Bioorg.Med.Chem.Lett.* **20** 499
- 2) Noto *et al.* (2013), *Stearoyl-CoA desaturase-1 is a key factor for lung cancer-initiating cells*; *Cell Death and Differ.* **4** e947
- 3) Rodriguez-Perez *et al.* (2017) *Altered fatty acid metabolism and reduced stearoyl coenzyme A desaturase activity in asthma*; *Allergy*, **72** 1744 [Citation]

PHYSICAL DATA

Molecular Weight:	421.44
Molecular Formula:	C ₁₉ H ₁₈ F ₃ N ₅ OS
Purity:	>98%
	NMR: (Conforms)
Solubility:	Soluble in DMSO (>25 mg/ml).
Physical Description:	Off-white to pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Store solutions in DMSO at -20°C for up to 1 month. Make solutions in water fresh daily.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.