

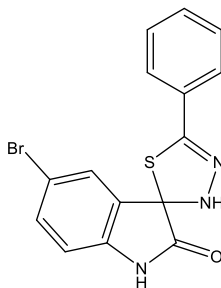
Catalog # 10-3902

Lipofermata

CAS# 297180-15-5

5-Bromo-5'-phenylspiro[1H-indole-3,2'-3H-1,3,4-thiadiazole]-2-one; CB16.2

Lot # FBA6052



Lipofermata is an inhibitor of fatty acid transport protein 2 (FATP2; $IC_{50} = 4.84 \mu M$).¹ It does not inhibit glucose transport or the activity of long chain acyl-CoA synthetase. It prevented palmitate-mediated oxidative stress, induction of BiP and CHOP, and cell death in a dose-dependent manner in hHepG2 and mINS-1E cells suggesting utility in preventing fatty acid-mediated cell death pathways and lipotoxic disease.² Inhibition was specific for long and very long chain fatty acids but not medium (C6-C10) acids. Lipofermata abrogates lipid transport into melanoma cells and reduces melanoma growth and invasion.³

- 1) Sandoval *et al.* (2010), *Identification and characterization of small compound inhibitors of human FATP2*; *Biochem. Pharmacol.* **79** 990
- 2) Ahowesso *et al.* (2015), *Chemical inhibition of fatty acid absorption and cellular uptake limits lipotoxic cell death*; *Biochem. Pharmacol.* **98** 167
- 3) Zhang *et al.* (2018), *Adipocyte-derived lipids mediate melanoma progression via FATP proteins*; *Cancer Discov.* **8** 1006

PHYSICAL DATA

Molecular Weight:	360.23
Molecular Formula:	C ₁₅ H ₁₀ BrN ₃ OS
Purity:	>98%
	NMR: (Conforms)
Solubility:	Soluble in DMSO (20 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Store solutions at -20°C for up to 1 month.

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