



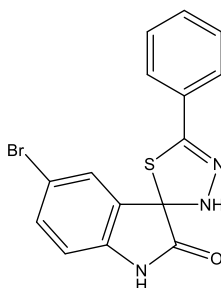
## Catalog # 10-3902

### 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;  $IC_{50} = 4.84 \mu M$ ).<sup>1</sup> 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 hsHepG2 and mINS-1E cells suggesting utility in preventing fatty acid-mediated cell death pathways and lipotoxic disease.<sup>2</sup> 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.<sup>3</sup>

- 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 <sub>15</sub> H <sub>10</sub> BrN <sub>3</sub> OS  |
| Purity:                | >98% HPLC  |
|                        | 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. |

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