

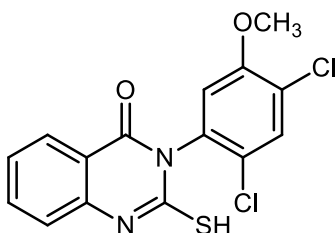
Catalog # 10-1179

Mdivi-1

CAS# 338967-87-6

3-(2,4-Dichloro-5-methoxyphenyl)-2-sulfanyl-4(3H)-quinazolinone

Lot # X101010



Selective inhibitor of Dnm1 GTPase (DRP1), $IC_{50}=1-10 \mu M^1$. Inhibits mitochondrial outer membrane permeabilization and mitochondrial division². Prevents cell cycle progression in human lung cancer cells³. Induces mitochondrial hyperfusion and sensitizes human cancer cells to apoptosis induction via other agents^{4,5}. Cell permeable.

- 1) Cassidy-Stone *et al.* (2008), *Chemical inhibition of the mitochondrial division dynamin reveals its role in Bax/Bak-dependent mitochondrial outer membrane permeabilization*; *Dev. Cell*, **14** 193
- 2) Lackner *et al.* (2010), *Small molecule inhibitors of mitochondrial division: tools that translate basic biological research into medicine*; *Chem. Biol.*, **17** 578
- 3) Rehman *et al.* (2012), *Inhibition of mitochondrial fission prevents cell cycle progression in lung cancer*; *FASEB J.*, **26** 2175
- 4) Akita *et al.* (2014), *Mitochondrial division inhibitor-1 induces mitochondrial hyperfusion and sensitizes human cancer cells to TRAIL-induced apoptosis*; *Int. J. Oncol.*, **45** 1901
- 5) Serasinghe *et al.* (2015), *Mitochondrial Division Is Requisite to RAS-Induced Transformation and Targeted by Oncogenic MAPK Pathway Inhibitors*; *Mol. Cell*, **57** 521

PHYSICAL DATA

Molecular Weight:	353.23
Molecular Formula:	C ₁₅ H ₁₀ Cl ₂ N ₂ O ₂ S
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months.

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