

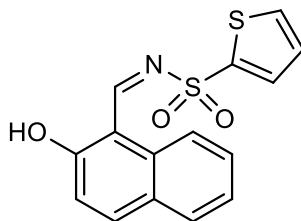
Catalog # 10-1510

STF-083010

307543-71-1

N-[(2-Hydroxy-1-naphthalenyl)methylene]-2-thiophenesulfonamide

Lot # X106801



A novel small molecule inhibitor of Ire1. It inhibits Ire1 endonuclease activity but not its kinase activity after endoplasmic reticulum stress¹⁻³. It displays significant antimyeloma activity in model human MM xenografts¹. Induces apoptosis in pancreatic cancer cells and displays growth inhibition in a clonogenic growth assay in soft agar as well as in a xenograft *in vivo* model of pancreatic cancer⁴. Active *in vivo*.

- 1) Papandreou *et al.* (2011), *Identification of an Ire1alpha endonuclease specific inhibitor with cytotoxic activity against human multiple myeloma*; Blood, **117** 1311
- 2) Wang *et al.* (2012), *Divergent allosteric control of the IRE1α endoribonuclease using kinase inhibitors*; Nature Chem. Biol., **8** 982
- 3) Tam *et al.* (2014), *Ire1 has distinct catalytic mechanisms for XBP/HAC1 splicing and RIDD*; Cell Rep., **9** 850
- 4) Chien *et al.* (2014), *Selective inhibition of unfolded protein response induces apoptosis in pancreatic cancer cells*; Oncotarget, **5** 4881

PHYSICAL DATA

Molecular Weight:	317.39
Molecular Formula:	C ₁₅ H ₁₁ NO ₃ S ₂
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml)
Physical Description:	Green solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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