

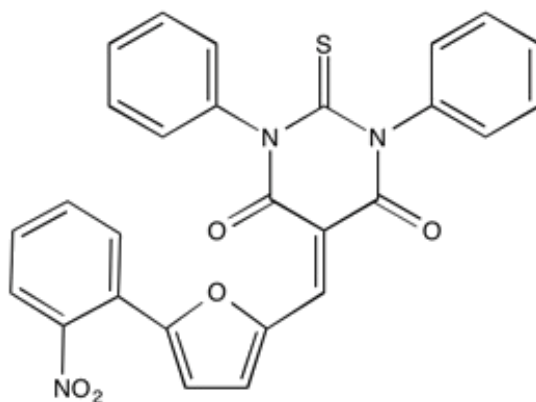
Catalog # 10-1544

UCF-101

CAS# 313649-08-0

Dihydro-5[[5-(2-nitrophenyl)-2-furanyl]methylene]-1,3-diphenyl-2-thioxo-4,6(1H,5H)-pyrimidinedione

Lot # S102089



UCF-101 is a potent, specific, competitive, and reversible inhibitor of the pro-apoptotic, mitochondrial serine protease Omi/HtrA2 ($IC_{50} = 9.5 \mu\text{M}$ for His-Omi₁₃₄₋₄₅₈). Shows very little activity against various other serine proteases tested ($IC_{50} \geq 200 \mu\text{M}$).¹ Mitigates streptozotocin-induced cardiomyocyte dysfunction.² Protects against cerebral oxidative injury and cognitive impairment in a rat model.³ Cell permeable.

- 1) Cilenti et al. (2003), *Characteristics of a novel and specific inhibitor for the pro-apoptotic protease Omi/HtrA2*; J. Biol. Chem., **278** 11489
- 2) Li et al. (2009), *UCF-101 mitigates streptozotocin-induced cardiomyocyte dysfunction: role of AMPK*; Am. J. Physiol. Endocrinol. Metab., **297** E965
- 3) Hu et al. (2013), *Ucf-101 protects against cerebral oxidative injury and cognitive impairment in septic rat*; Int. Immunopharmacol., **16** 108

PHYSICAL DATA

Molecular Weight:	495.51
Molecular Formula:	C ₂₇ H ₁₇ N ₃ O ₅ S
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (up to 30 mg/ml with warming) or in DMF (up to 25 mg/ml)
Physical Description:	Orange solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or SMF may be stored 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.