

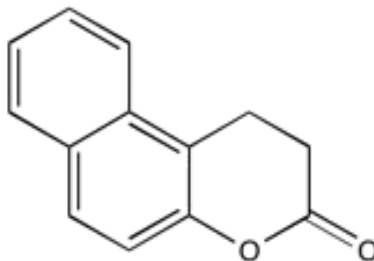
**Catalog # 10-2615**

**Splitomicin**

CAS# 5690-03-9

1,2-Dihydro-3H-naphtho[2,1-b]pyran-3-one

Lot # X101325



Initially shown to inhibit Sir2p (the yeast Sirt1 homolog) and create a conditional phenocopy of a sir2 deletion mutant in *S. cerevisiae*<sup>1</sup>. Cells grown in the presence of the drug have silencing defects at telomeres, silent mating-type loci and the ribosomal DNA<sup>1</sup>. Inhibits all class III HDACs (sirtuins) and alleviates gene silencing in Fragile X mental retardation syndrome<sup>2</sup>. Reverses ischemic preconditioning-induced cardioprotection in a mouse model<sup>3</sup>.

- 1) Bedalov *et al.* (2001), *Identification of a small molecule inhibitor of Sir2p*; Proc. Natl. Acad. Sci. USA, **98** 15113
- 2) Biacsi *et al.* (2008), *SIRT1 inhibition alleviates gene silencing in Fragile X mental retardation syndrome*; PLoS Genet., **4(3)** e1000017
- 3) Nadochiy *et al.* (2011), *Lysine deacetylation in ischaemic preconditioning: the role of SIRT1*; Cardiovasc. Res., **89** 643

**PHYSICAL DATA**

Molecular Weight:	198.22
Molecular Formula:	C <sub>13</sub> H <sub>10</sub> O <sub>2</sub>
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml) or Ethanol (up to 25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO or ethanol 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.**