

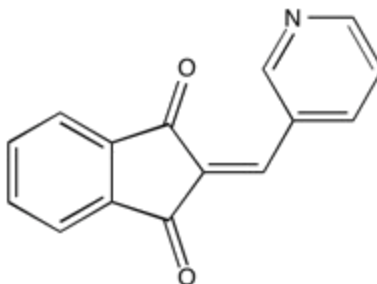
Catalog # 10-1478

PRT4165

CAS# 31083-55-3

2-(3-Pyridinylmethylene)-1H-indene-1,3(2H)-dione

Lot # X106261



Inhibitor of Bmi1/Ring1A, subunits of the polycomb repressive complex 1 (PRC1). Inhibits self-ubiquitination ($IC_{50} = 3.9 \mu\text{M}$) but does not increase cellular levels of either subunit. Blocks Bmi1/Ring1A-mediated ubiquitination and drug-induced degradation of topoisomerase 2 α .¹ Inhibits H2A/H2AX ubiquitination via blocking the E3 ubiquitin ligase activity of RNF2 and a Bmi1/RNF2 complex. Blocks polycomb repressor complex (PRC) 1-mediated histone H2A ubiquitination *in vitro* and *in vivo* and as such represents a new tool for studying chromatin remodeling.²

- 1) Alchanati *et al.* (2009), *The E3 ubiquitin-ligase Bmi1/Ring1A controls the proteasomal degradation of Top2alpha cleavage complex – a potentially new drug target*, PLoS One, **4** e8104
- 2) Ismail *et al.* (2013), *A small molecule inhibitor of polycomb repressive complex 1 inhibits ubiquitin signaling at DNA double-strand breaks*; J. Biol. Chem., **288** 26944

PHYSICAL DATA

Molecular Weight:	235.24
Molecular Formula:	C ₁₅ H ₉ NO ₂
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml), or Ethanol (up to 6 mg/ml with warming)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied, desiccated at room temperature for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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