

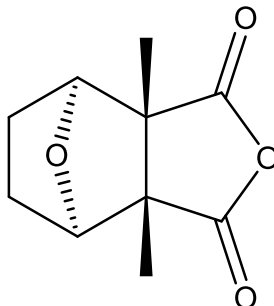
Catalog # 10-1013

Cantharidin

3 α ,7 α -Dimethylhexahydro-4,7-epoxyisobenzofuran-1,3-dione

CAS# 56-25-7

Lot # X101911



Inhibits protein phosphatase 2A ($K_i=0.19 \mu\text{M}$) and PP1 ($K_i=1.1 \mu\text{M}$)¹. Displays >500-fold selectivity over PP2B. Suppresses growth and migration of PANC-1 pancreatic cancer cells via phosphorylation and degradation of β -catenin². Arrests G2/M transition via JNK/Sp1-dependent down-regulation of CDK1³. Cell permeable. Warning: Avoid skin contact, may cause skin irritation or blistering.

- 1) Honkanen (1993) *Cantharidin, another natural toxin that inhibits the activity of serine/threonine protein phosphatases types 1 and 2A*; FEBS Lett. **330** 283
- 2) Wu et al. (2014) *PP2A inhibitors suppress migration and growth of PANC-1 pancreatic cancer cells through inhibition on the Wnt/ β -Catenin pathway by phosphorylation and degradation of β -catenin*; Oncol. Rep., **32** 513
- 3) Gong et al. (2015) *PP2A inhibitors arrest G2/M transition through JNK/Sp1-dependent down-regulation of CDK1 and autophagy up-regulation of p21*; Oncotarget, **6** 18469

PHYSICAL DATA

Molecular Weight:	196.20
Molecular Formula:	C ₁₀ H ₁₂ O ₄
Purity:	98% (TLC: 5% Methanol/methylene chloride; R _f = 0.40)
	NMR (Conforms)
Solubility:	DMSO (up to 20 mg/ml) or ethanol (up to 5 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied 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 2 weeks.

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