

**Catalog # 10-2097**

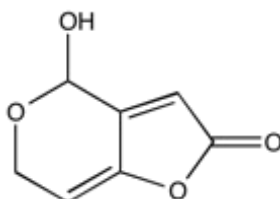
**Patulin**

CAS# 149-29-1

Clavacin, Mycoin, Penicidin, Terinin, NSC8120

4-Hydroxy-4H-furo[3,2-c]pyran-2(6H)-one

Lot # X101437



A mycotoxin found in contaminated fruits. Increases ROS generation and oxidative stress in cells which is mediated by p53.<sup>1</sup> Displays cytotoxic effects on a variety of cell lines.<sup>2</sup> Causes damage to several organs including liver and kidney in laboratory animals.<sup>3</sup> Triggers NRF2-mediated survival mechanisms in kidney cells.<sup>4</sup> Induces apoptosis through a ROS-mediated ER stress pathway.<sup>5</sup>

- 1) Jin *et al.* (2016), *p53 activation contributes to patulin-induced nephrotoxicity via modulation of reactive oxygen species generation*; *Sci. Rep.*, **6** 24455
- 2) Zouaoui *et al.* (2016), *Cytotoxic effects induced by patulin, sterigmatocystin and beauvericin on CHO-K1 cells*; *Food Chem. Toxicol.*, **89** 92
- 3) Boussabbeh *et al.* (2016), *Tissue oxidative stress induced by patulin and protective effect of crocin*; *Neurotoxicology*, **53** 343
- 4) Pillay *et al.* (2015), *Patulin triggers NRF2-mediated survival mechanisms in kidney cells*; *Toxicol.*, **99** 1
- 5) Boussabbeh *et al.* (2015), *Patulin induces apoptosis through ROS-mediated endoplasmic reticulum stress pathway*; *Toxicol. Sci.*, **144** 328

**PHYSICAL DATA**

Molecular Weight:	154.12
Molecular Formula:	C <sub>7</sub> H <sub>6</sub> O <sub>4</sub>
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 10 mg/ml) or Ethanol (up to 10 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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