

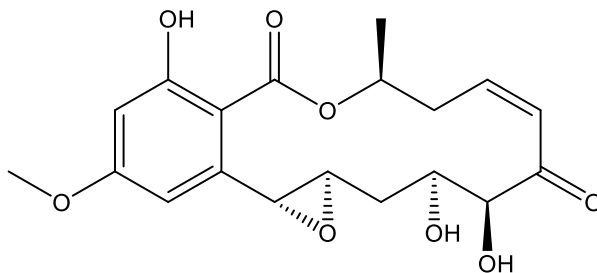
**Catalog # 10-2483**

**Hypothemycin**

CAS# 76958-67-3

Natural product isolated from *Phoma* sp.

Lot # X106971



Potent and selective inhibitor of MEK.<sup>1-3</sup> Acts via covalent binding to Cys residue.<sup>2</sup> In cells, hypothemycin inhibits the MEK-ERK axis with sufficient selectivity to normalize transformed phenotypes.<sup>3</sup> Inhibits TNF $\alpha$  production in LPS-stimulated macrophages.<sup>4</sup>

- 1) Zhou *et al.* (1999), *Resorcylic acid lactones: naturally occurring potent and selective inhibitors of MEK*; J. Antibiot., **52** 1086
- 2) Schirmer *et al.* (2006), *Targeted covalent inactivation of protein kinases by resorcylic acid lactone polyketides*; Proc. Natl. Acad. Sci. USA, **103** 4234
- 3) Fukazawa *et al.* (2010), *The resorcylic acid lactone hypothemycin selectively inhibits the mitogen-activated protein kinase kinase-extracellular signal-regulated kinase pathway in cells*; Biol. Pharm. Bull., **33** 168
- 4) Park *et al.* (2015), *Hypothemycin inhibits tumor necrosis factor- $\alpha$  production by tristetraprolin-dependent down-regulation of mRNA stability in lipopolysaccharide-stimulated macrophages*; Int. Immunopharmacol., **29** 863

**PHYSICAL DATA**

Molecular Weight:	378.37
Molecular Formula:	C <sub>19</sub> H <sub>22</sub> O <sub>8</sub>
Purity:	>96% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 10 mg/ml)
Physical Description:	White 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 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.**