

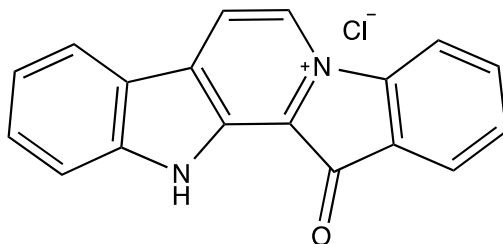
**Catalog # 10-1517**

**Fascaplysin**

114719-57-2

12,13-Dihydro-13-oxopyrido[1,2-a:3,4-b']diindol-5-ium chloride

Lot # X106829



A novel marine natural product isolated from *Thorectandra sp.*<sup>1</sup> A potent and selective inhibitor of cyclin dependent kinase 4/cyclin D1 ( $IC_{50} = 0.35 \mu M$ ) and is less selective for Cdk6/D1 ( $IC_{50} = 3.4 \mu M$ ). Displays antiangiogenic activity.<sup>2</sup> Displays high cytotoxic activity against small cell lung cancer cell lines acting via multiple mechanisms including topoisomerase I, DNA integrity and ROS.<sup>3</sup>

- 1) Soni *et al.* (2000), *Inhibition of cyclin-dependent kinase 4 (Cdk4) by fascaplysin, a marine natural product*; Biochem.Biophys.Res.Comm., **275** 877
- 2) Lin *et al.* (2007), *Fascaplysin, a selective CDK4 inhibitor, exhibit anti-angiogenic activity in vitro and in vivo*; Cancer Chemother.Pharmacol., **59** 439
- 3) Hamilton *et al.* (2014), *Cytotoxic effects of fascaplysin against small cell lung cancer cell lines*; Mar.Drugs, **12** 1377

**PHYSICAL DATA**

Molecular Weight:	306.75
Molecular Formula:	$C_{18}H_{11}ClN_2O_4$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml) or Water (up to 2 mg/ml)
Physical Description:	Dark red-brown solid
Storage and Stability:	Store as supplied desiccated at $-20^{\circ}C$ for up to 1 year from the date of purchase. Solutions in DMSO or water may be stored at $-20^{\circ}C$ 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.