Product Data Sheet

F16

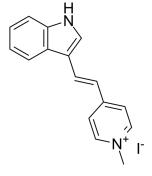
Cat. No.:HY-100395CAS No.:36098-33-6Molecular Formula: $C_{16}H_{15}IN_2$ Molecular Weight:362.21

Target: Apoptosis; Apoptosis

Pathway: Apoptosis

Storage: 4°C, sealed storage, away from moisture

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro DMSO : ≥ 31 mg/mL (85.59 mM)

Ethanol: 1 mg/mL (2.76 mM; Need ultrasonic)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7608 mL	13.8041 mL	27.6083 mL
	5 mM	0.5522 mL	2.7608 mL	5.5217 mL
	10 mM	0.2761 mL	1.3804 mL	2.7608 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

F16 is a potent growth inhibitor of the *neu*-overexpressing cells and also selectively inhibits proliferation of mammary epithelial as well as a variety of mouse mammary tumor and human breast cancer cell lines. F16 is a mitochondriotoxic compound, and triggers apoptosis or necrosis depending on the genetic background of the target carcinoma cell^{[1][2]}.

In Vitro

F16 (3 μ M; 3 days/7 days) affects growth in several mouse and human cancer cell lines^[1]. F16 arrests cell cycle and increases apoptosis in F16-sensitive EpH4-A6 cells^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay^[1]

Cell Line:	MDA-MB231, MDA-MB435, MDA-MB436, MDA-MB453, MDA-MB-468, SKBR-3, MCF-7, T47D, ZR-75-1 cells and mouse mammary epithelial cell line NMuMG
Concentration:	3 μΜ
Incubation Time:	3 days/7 days

Result:	Displayed antiproliferative activity against both mouse and human breast cancer cells.
	The growth of the mouse fibrosarcoma cell lines derived from ras-transgenic mice was not
	affected.

REFERENCES

[1]. Fantin VR et al. A novel mitochondriotoxic small molecule that selectively inhibits tumor cell growth. Cancer Cell. 2002 Jul;2(1):29-42.

[2]. Fantin VR et al. F16, a mitochondriotoxic compound, triggers apoptosis or necrosis depending on the genetic background of the target carcinoma cell. Cancer Res. 2004 Jan 1;64(1):329-36.

Caution: Product has not been fully validated for medical applications. For research use only.

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