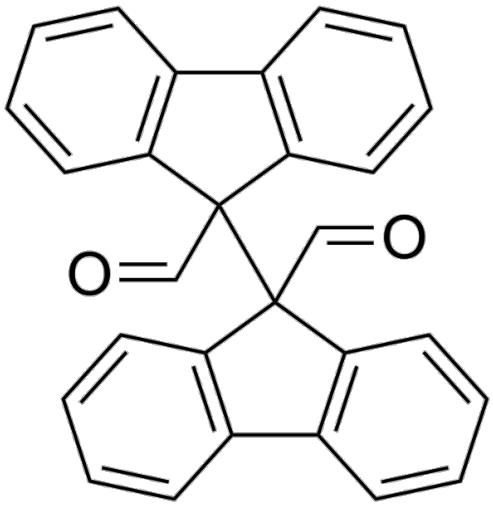
Product Data Sheet

Product Name: Raptinal
Cat. No.: GC63914

Chemical Properties

Cas. No.	1176-09-6		
Formula	C28H18O2	M.Wt	386.44
Solubility	DMSO : 33.33 mg/mL (86.25 mM; Need ultrasonic)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

Raptinal, a agent that directly activates caspase-3, initiates intrinsic pathway caspase-dependent apoptosis. Raptinal is able to rapidly induce cancer cell death by directly activating the effector caspase-3, bypassing the activation of initiator caspase-8 and caspase-9[1][2].

H. pylori infection-induced apoptosis resistance in gastric epithelial cells triggered by Raptinal[1]. Treatment with 10 μM of Raptinal for 2 h induces the cleavage of pro-caspase-3 into it's active form in human gastric cancer cell lines AGS, MKN28, MKN45[1].Raptinal initiates intrinsic pathway

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

caspase-dependent apoptosis within minutes in multiple cell lines. Raptinal induces death against various cancer and non-cancerous cell lines with 24 hour IC50 values between 0.7-3.4 μM, indicating activity across a wide variety of cell lines[2].

Raptinal is an unusually rapid inducer of caspase-dependent apoptosis in multiple cell lines and in vivo systems[1]. Raptinal (20 mg/kg; administered intraperitoneally; once daily for 3 consecutive days for B16-F10 and 4 consecutive days for 4T1 models) exerts anticancer activity in vivo[2].C57BL/6 mice are administered intravenous Raptinal across a range of dosages as a one-time injection. When administered intravenously at a dosage of 37.5 mg/kg, the peak plasma concentration and elimination half-life of Raptinal are 54.4±0.9 μg/mL and 92.1±5.8 minutes, respectively. Single-dose intravenous Raptinal is well tolerated across a wide dose range (15-60 mg/kg) and does not cause hematologic toxicity as assessed 7 days post-administration[2].

[1]. Yanheng Chen, et al. H. pylori infection confers resistance to apoptosis via Brd4-dependent BIRC3 eRNA synthesis. Cell Death Dis. 2020 Aug 21;11(8):667.
[2]. Rahul Palchaudhuri,et al. A Small Molecule that Induces Intrinsic Pathway Apoptosis with Unparalleled Speed. Cell Rep. 2015 Dec 1;13(9):2027-36.

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA