

$\beta,\beta$ -Dimethylacrylshikonin

## Chemical Properties

CAS No. :	24502-79-2
Formula:	C <sub>21</sub> H <sub>22</sub> O <sub>6</sub>
Molecular Weight:	370.396
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

## Biological Description

Description	1. $\beta,\beta$ -Dimethylacrylshikonin (Dimethylacrylshikonin) is a promising agent for developing an improved strategy for radiotherapy against tumors. (a) Injection of Dimethylacrylshikonin combined with IR treatment significantly suppressed tumor growth of the HCT-116 xenograft. (b) Dimethylacrylshikonin significantly suppressed the growth of H(22) transplantable hepatoma, and induced the activation of caspase-3. (c) Dimethylacrylshikonin inhibited growth of gastric cancer SGC-791 cells by inducing ERK signaling pathway. 2. Dimethylacrylshikonin inhibits the proliferation of MCF-7 cells in vitro by inducing apoptosis through the downregulation of Bcl-2, upregulation of Bax and partial inactivation of the NF- $\kappa$ B pathway.
Targets(IC50)	Apoptosis,ERK,Bcl-2 Family,HIF/HIF Prolyl-Hydroxylase,Gamma-secretase,NO Synthase

## Solubility Information

Solubility	DMSO: 8.55 mg/mL (23.08 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6998 mL	13.4989 mL	26.9978 mL
5 mM	0.540 mL	2.6998 mL	5.3996 mL
10 mM	0.270 mL	1.3499 mL	2.6998 mL
50 mM	0.054 mL	0.270 mL	0.540 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Kwak S , Jeong Y , Kim B , et al.  $\beta,\beta$ -Dimethylacrylshikonin sensitizes human colon cancer cells to ionizing radiation through the upregulation of reactive oxygen species[J]. Oncology Letters, 2014.

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