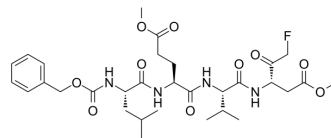


## Z-LEVD-FMK

<b>Cat. No.:</b>	HY-128707		
<b>CAS No.:</b>	1135688-25-3		
<b>Molecular Formula:</b>	C <sub>31</sub> H <sub>45</sub> FN <sub>4</sub> O <sub>10</sub>		
<b>Molecular Weight:</b>	653		
<b>Target:</b>	Apoptosis; Caspase		
<b>Pathway:</b>	Apoptosis		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 125 mg/mL (191.42 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.5314 mL	7.6570 mL	15.3139 mL
5 mM	0.3063 mL	1.5314 mL	3.0628 mL
10 mM	0.1531 mL	0.7657 mL	1.5314 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Z-LEVD-FMK is a cell-permeable caspase-4 inhibitor. Z-LEVD-FMK blocks ER stress-induced apoptosis in cancer cells<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

Caspase-4

#### In Vitro

Z-LEVD-FMK (2 ng/mL, 30 min) blocks IL-1β-induced IL-8 production in hRPE cells<sup>[1]</sup>.

Z-LEVD-FMK (2 μM) inhibits caspase-3 activity in hRPE cells<sup>[1]</sup>.

Z-LEVD-FMK (20 μM, 96 h) completely blocks E<sub>2</sub>-induced PARP cleavage in 5C cells<sup>[2]</sup>.

Z-LEVD-FMK (20 μM, 96 h) reverses E<sub>2</sub>-inhibited growth and prevents morphologic alterations associated with apoptosis in 5C cells<sup>[2]</sup>.

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

Western Blot Analysis<sup>[1]</sup>

Cell Line: hRPE cells (treated with IL-1β of 2 ng/mL for additional 24 h)

Concentration: 2 ng/mL

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Incubation Time:	30 min
Result:	Inhibited IL-1 $\beta$ -induced IL-8 production.

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## REFERENCES

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[1]. Bian ZM, et al. Dual involvement of caspase-4 in inflammatory and ER stress-induced apoptotic responses in human retinal pigment epithelial cells. Invest Ophthalmol Vis Sci. 2009 Dec;50(12):6006-14.

[2]. Ariazi EA, et al. Estrogen induces apoptosis in estrogen deprivation-resistant breast cancer through stress responses as identified by global gene expression across time. Proc Natl Acad Sci U S A. 2011 Nov 22;108(47):18879-86.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA