

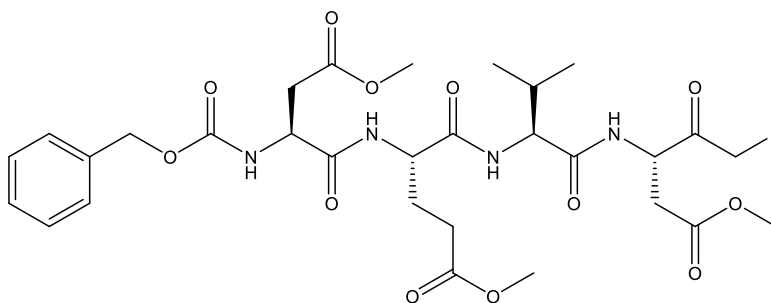
Catalog # 10-2904

Z-DEVD-FMK

CAS# 210344-95-9

Benzyloxycarbonyl-Asp(OMe)-Glu(OMe)-Val-Asp(OMe)-fluoromethylketone

Lot # X110452



A cell-permeable trimethyl ester form of the irreversible caspase-3 inhibitor DEVD-FMK (fluoromethylketone) with $IC_{50} = 130$ nM.^{1,2} Methyl esters confer cell permeability and are hydrolyzed to the active COOH form via intracellular esterases. Inhibits caspase-3-dependent apoptosis and pyroptosis in a variety of cell lines.^{3,4} Active *in vivo*.⁵

- 1) Nicholson *et al.* (1995), *Identification and inhibition of the ICE/CED-3 protease necessary for mammalian apoptosis*; Nature, **376** 37
- 2) Brockstedt *et al.* (1998), *Identification of apoptosis-associated proteins in a human Burkitt lymphoma cell line. Cleavage of heterogenous nuclear ribonucleoprotein A1 by caspase 3*; J. Biol. Chem., **273** 28057
- 3) Wang *et al.* (2022), *Osthole Induces Apoptosis and Caspase-3/GSDME-Dependent Pyroptosis via NQO1-Mediated ROS Generation in HeLa Cells*; Oxid. Med. Cell. Longev., **2022** 8585598
- 4) Jung *et al.* (2022), *Withanolide modulates the potential crosstalk between apoptosis and autophagy in different colorectal cancer cell lines*; Eur. J. Pharmacol., **928** 175113
- 5) Knoblach *et al.* (2004), *Caspase inhibitor Z-DEVD-FMK attenuates calpain and necrotic cell death in vitro and after traumatic brain injury*; J. Cereb. Blood Flow Metab., **24** 1119

PHYSICAL DATA

Molecular Weight:	668.67
Molecular Formula:	C ₃₀ H ₄₁ FN ₄ O ₁₂
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (20 mg/ml)
Physical Description:	Lyophilized solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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