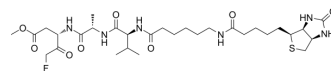


Biotin-VAD-FMK

Cat. No.:	HY-100894		
CAS No.:	1135688-15-1		
Molecular Formula:	C ₃₀ H ₄₉ FN ₆ O ₈ S		
Molecular Weight:	672.81		
Target:	Caspase		
Pathway:	Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 27.3 mg/mL (40.58 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
	1 mM		1.4863 mL	7.4315 mL	14.8630 mL
	5 mM		0.2973 mL	1.4863 mL	2.9726 mL
	10 mM		0.1486 mL	0.7432 mL	1.4863 mL

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

BIOLOGICAL ACTIVITY

Description	Biotin-VAD-FMK is a cell permeable, irreversible biotin-labeled caspase inhibitor, used to identify active caspases in cell lysates.
IC₅₀ & Target	Caspase
In Vitro	Biotin-VAD-FMK is a synthetic peptide designed as a methyl ester to facilitate cell permeability. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	To examine whether caspase-2 is activated in the absence of proteolytic cleavage, an in vivo affinity labeling approach is used, using the biotinylated caspase inhibitor biotin-VAD-fmk that detects only active caspases ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Li J, et al. Nitric oxide suppresses apoptosis via interrupting caspase activation and mitochondrial dysfunction in cultured hepatocytes. J Biol Chem. 1999 Jun 11;274(24):17325-33.

[2]. Samraj AK, et al. Loss of caspase-9 reveals its essential role for caspase-2 activation and mitochondrial membranepolarization. Mol Biol Cell. 2007 Jan;18(1):84-93.

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

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