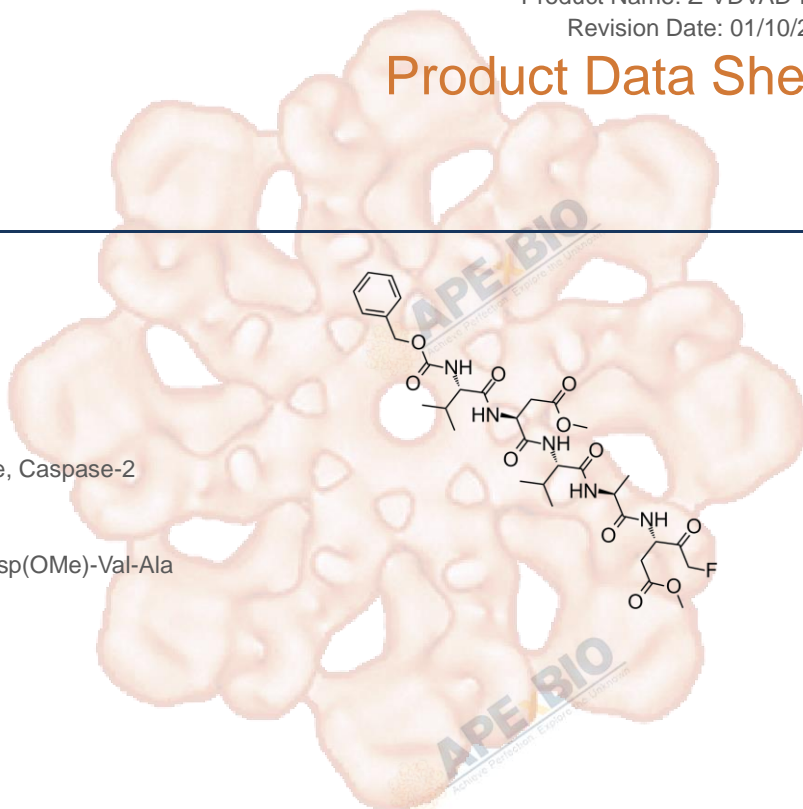


# Product Data Sheet

## Z-VDVAD-FMK

<b>Cat. No.:</b>	A1922
<b>CAS No.:</b>	210344-92-6
<b>Formula:</b>	C32H46N5O11F
<b>M.Wt:</b>	695.73
<b>Synonyms:</b>	Z-VDVAD-fluoromethylketone, Caspase-2 Inhibitor (fluoromethylketone), Z-Val-Asp(OMe)-Val-Ala -Asp(OMe)-FMK
<b>Target:</b>	Apoptosis
<b>Pathway:</b>	Caspase
<b>Storage:</b>	Store at -20°C



## Solvent & Solubility

≥34.8 mg/mL in DMSO; insoluble in EtOH; insoluble in H2O

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	<b>Concentration</b>			
	<b>1 mM</b>	1.4373 mL	7.1867 mL	14.3734 mL
	<b>5 mM</b>	0.2875 mL	1.4373 mL	2.8747 mL
	<b>10 mM</b>	0.1437 mL	0.7187 mL	1.4373 mL

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

## Biological Activity

Shortsummary

Caspase-2 inhibitor

IC<sub>50</sub> & Target

In Vitro

### Cell Viability Assay

Preparation method:

The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below

		-20°C for several months.
	Reacting conditions:	25 or 100 µM; 1 or 22 h
	Applications:	Jurkat T-lymphocytes pretreated with 25 µM Z-VDVAD-FMK for 1 h, or stably transfected with pro-caspase-2 antisense (Casp-2/AS) are refractory to cytochrome c release stimulated by etoposide. According to the MTT-assay, Jurkat cells treated with 100 µM Z-VDVAD-FMK for 22 h prevented doxorubicin-induced nuclear apoptosis, but not cell death.
In Vivo	<b>Animal experiment</b>	
	Applications:	

## Product Citations

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

- [1]. J. D. Robertson, M. Enoksson et al. Caspase-2 Acts Upstream of Mitochondria to Promote Cytochrome c Release during Etoposide-induced Apoptosis. The Journal of Biological Chemistry. 277, :29803–29809, 2002.
- [2]. Gamen et al (2000) Doxorubicin treatment activates a Z-VAD-sensitive caspase, which causes Dym loss, caspase-9 activity, and apoptosis in Jurkat cells. Exp.Cell Res. 258 223.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

*Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.*

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