

# PRODUCT INFORMATION



## Z-DEVD-CMK (trifluoroacetate salt)

Item No. 27149

**Formal Name:** N-[(phenylmethoxy)carbonyl]-L- $\alpha$ -aspartyl-L- $\alpha$ -glutamyl-N-[(1S)-1-(carboxymethyl)-3-chloro-2-oxopropyl]-L-valinamide, trifluoroacetate salt

**Synonym:** Z-Asp-Glu-Val-Asp-CMK

**MF:** C<sub>27</sub>H<sub>35</sub>ClN<sub>4</sub>O<sub>12</sub> • XCF<sub>3</sub>COOH

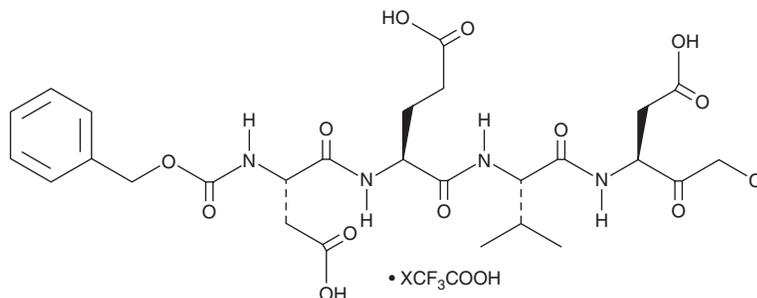
**FW:** 643.0

**Purity:**  $\geq$ 95%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Z-DEVD-CMK (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Z-DEVD-CMK (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Z-DEVD-CMK (trifluoroacetate salt) is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

### Description

Z-DEVD-CMK is a protease inhibitor.<sup>1</sup> It irreversibly inhibits recombinant caspase-3, cathepsin B, cathepsin L, cathepsin V, cathepsin F, and cathepsin S in enzyme assays but has no effect on these cathepsins in Jurkat T cells. Z-DEVD-CMK (3 mg/kg) improves endotoxin-induced myocardial dysfunction and reduces caspase-1, -3, and -8 activation and apoptosis in a rat model of endotoxin-induced myocardial dysfunction and heart apoptosis.<sup>2</sup>

### References

1. Rozman-Pungercar, J., Kopitar-Jerala, N., Bogyo, M., *et al.* Inhibition of papain-like cysteine proteases and legumain by caspase-specific inhibitors: When reaction mechanism is more important than specificity. *Cell Death Differ.* **10(8)**, 881-888 (2003).
2. Fauvel, H., Marchetti, P., Chopin, C., *et al.* Differential effects of caspase inhibitors on endotoxin-induced myocardial dysfunction and heart apoptosis. *Am. J. Physiol. Heart Circ. Physiol.* **280(4)**, H1608-H1614 (2001).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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