

PRODUCT INFORMATION



Ac-DEVD-CMK (trifluoroacetate salt)

Item No. 14465

Formal Name: N-acetyl-L- α -aspartyl-L- α -glutamyl-N-[(1S)-1-(carboxymethyl)-3-chloro-2-oxopropyl]-L-valinamide, 2,2,2-trifluoroacetate salt

Synonyms: Ac-Asp-Glu-Val-Asp-CMK, Caspase-3 Inhibitor III

MF: C₂₁H₃₁ClN₄O₁₁ • XCF₃COOH

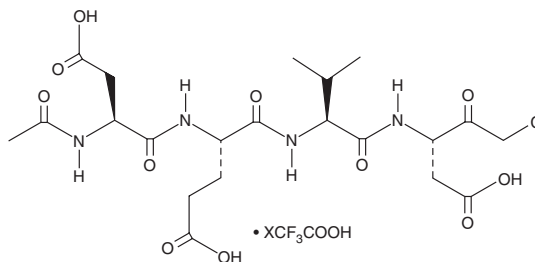
FW: 551.0

Purity: \geq 98%

Supplied as: A crystalline 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

Ac-DEVD-CMK (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the Ac-DEVD-CMK (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Ac-DEVD-CMK (trifluoroacetate salt) is soluble in DMSO at a concentration of approximately 50 mg/ml.

Ac-DEVD-CMK (trifluoroacetate salt) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Ac-DEVD-CMK is a cell-permeable, and irreversible inhibitor of caspase-3 as well as caspase-6, -7, -8, and -10.¹⁻³ It is commonly used at concentrations up to 100 μ M to examine the role of caspase-3-dependent apoptosis in biological systems.^{1,4}

References

1. Mocanu, M.M., Baxter, G.F., and Yellon, D.M. Caspase inhibition and limitation of myocardial infarct size: Protection against lethal reperfusion injury. *Br. J. Pharmacol.* **130(2)**, 197-200 (2000).
2. Schrantz, N., Blanchard, D.A., Mitente, F., et al. Manganese induces apoptosis of human B cells: Caspase-dependent cell death blocked by Bcl-2. *Cell Death Differ.* **6(5)**, 445-453 (1999).
3. Thornberry, N.A. and Lazebnik, Y. Caspases: Enemies within. *Science* **281(5381)**, 1312-1316 (1998).
4. Zhang, Y., Wang, H., Li, J., et al. Peroxynitrite-induced neuronal apoptosis is mediated by intracellular zinc release and 12-lipoxygenase activation. *J. Neurosci.* **24(47)**, 10616-10627 (2004).

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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