

# PRODUCT INFORMATION



## Z-YVAD-AFC (trifluoroacetate salt)

Item No. 27137

**Formal Name:** N-[(phenylmethoxy)carbonyl]-L-tyrosyl-L-valyl-L-alanyl-N-[2-oxo-4-(trifluoromethyl)-2H-1-benzopyran-7-yl]-L- $\alpha$ -asparagine, trifluoroacetate salt

**Synonyms:** Z-Tyr-Val-Ala-Asp-AFC, Z-Tyr-Val-Ala-Asp-7-amino-4-trifluoromethylcoumarin, Z-YVAD-7-amino-4-trifluoromethylcoumarin

**MF:**  $C_{39}H_{40}F_3N_5O_{11} \cdot XCF_3COOH$

**FW:** 811.8

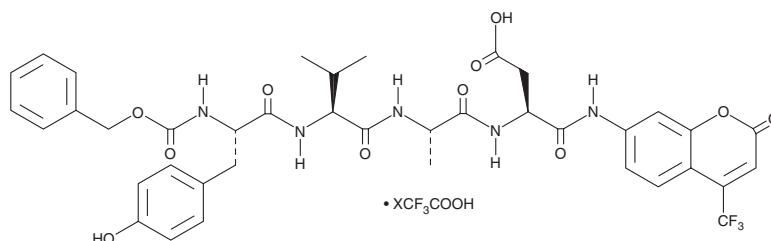
**Purity:**  $\geq 95\%$

**Ex./Em. Max:** 400/505 nm

**Supplied as:** A solid

**Storage:**  $-20^\circ\text{C}$

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



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

### Laboratory Procedures

Z-YVAD-AFC (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Z-YVAD-AFC (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Z-YVAD-AFC (trifluoroacetate salt) is soluble in solvents such as formic acid. The solubility of Z-YVAD-AFC (trifluoroacetate salt) in this solvent is approximately 1 mg/ml.

### Description

Z-YVAD-AFC is a fluorogenic substrate for caspase-1.<sup>1,2</sup> Upon enzymatic cleavage by caspase-1, 7-amino-4-trifluoromethylcoumarin (AFC) is released and its fluorescence can be used to quantify caspase-1 activity. AFC displays excitation/emission maxima of 400/505 nm, respectively.

### References

1. Thornberry, N.A., Bull, H.G., Calaycay, J.R., *et al.* A novel heterodimeric cysteine protease is required for interleukin-1 $\beta$  processing in monocytes. *Nature* **356**(6372), 768-774 (1992).
2. Marcelli, M., Cunningham, G.R., Haidacher, S.J., *et al.* Caspase-7 is activated during lovastatin-induced apoptosis of the prostate cancer cell line LNCaP. *Cancer Res.* **58**(1), 76-83 (1998).

#### 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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