

PRODUCT INFORMATION

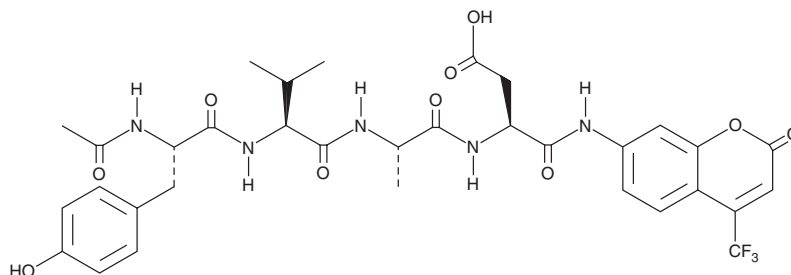


Ac-YVAD-AFC

Item No. 17591

CAS Registry No.: 219137-85-6
Formal Name: N-acetyl-L-tyrosyl-L-valyl-L-alanyl-N-[2-oxo-4-(trifluoromethyl)-2H-1-benzopyran-7-yl]-L- α -asparagine
Synonyms: Caspase-1 Substrate VI (Fluorogenic), Ac-Tyr-Val-Ala-Asp-7-amino-4-Trifluoromethylcoumarin

MF: C₃₃H₃₆F₃N₅O₁₀
FW: 719.7
Purity: \geq 95%
UV/Vis.: λ_{max} : 339 nm
Ex./Em. Max: 400/505 nm
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-YVAD-AFC is supplied as a crystalline solid. A stock solution may be made by dissolving the Ac-YVAD-AFC in the solvent of choice, which should be purged with an inert gas. Ac-YVAD-AFC is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of Ac-YVAD-AFC in these solvents is approximately 10 and 1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of Ac-YVAD-AFC can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of Ac-YVAD-AFC in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Ac-YVAD-AFC is a substrate whose amino acids YVAD have been shown to be a preferred cleavage site for caspase-1 and -4.^{1,2} Caspase activity can be quantified by fluorescent detection of free AFC (also known as 7-amino-4-trifluoromethylcoumarin), which is excited at 400 nm and emits at 505 nm.

References

1. Talanian, R.V., Quinlan, C., Trautz, S., *et al.* Substrate specificities of caspase family proteases. *J. Biol. Chem.* **272**(15), 9677-9682 (1997).
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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/08/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM