

PRODUCT INFORMATION



Suc-Leu-Leu-Val-Tyr-AMC (trifluoroacetate salt)

Item No. 37043

Formal Name: N-(3-carboxy-1-oxopropyl)-L-leucyl-L-leucyl-L-valyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-L-tyrosinamide, trifluoroacetate salt

Synonym: Suc-LLVY-AMC

MF: C₄₀H₅₃N₅O₁₀ • XCF₃COOH

FW: 763.9

Purity: ≥98%

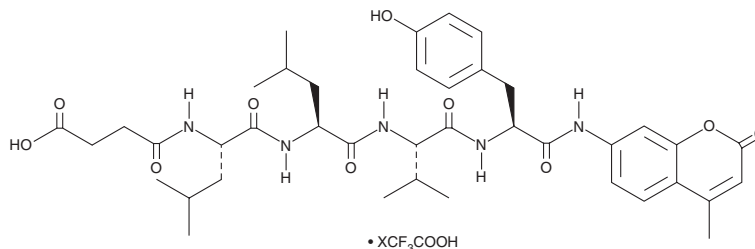
UV/Vis.: λ_{max}: 324 nm

EX./Em. Max: 340-360/440-460 nm

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

Suc-Leu-Leu-Val-Tyr-AMC (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Suc-Leu-Leu-Val-Tyr-AMC (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Suc-Leu-Leu-Val-Tyr-AMC (trifluoroacetate salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of Suc-Leu-Leu-Val-Tyr-AMC (trifluoroacetate salt) in these solvents is approximately 3 and 2 mg/ml, respectively.

Description

Suc-Leu-Leu-Val-Tyr-AMC is a fluorogenic substrate for the 20S proteasome, other chymotrypsin-like proteases, and calpains.^{1,2} Upon enzymatic cleavage, 7-amino-4-methylcoumarin (AMC) is released and its fluorescence can be used to quantify protease activity. AMC displays excitation/emission maxima of 340-360/440-460 nm, respectively.

References

1. Geier, E., Pfeifer, G., Wilm, M., *et al.* A giant protease with potential to substitute for some functions of the proteasome. *Science* **283**(5404), 978-981 (1999).
2. Sasaki, T., Kikuchi, T., Yumoto, N., *et al.* Comparative specificity and kinetic studies on porcine calpain I and calpain II with naturally occurring peptides and synthetic fluorogenic substrates. *J. Biol. Chem.* **259**(20), 12489-12494 (1984).

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, 10/24/2022

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