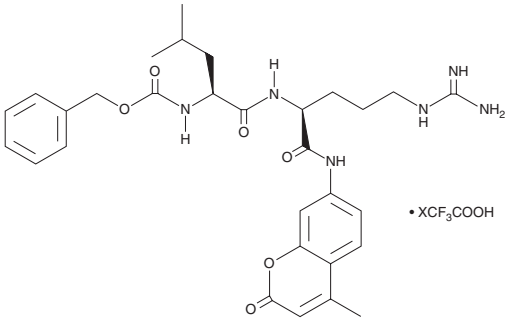
PRODUCT INFORMATION

Z-Leu-Arg-AMC (trifluoroacetate salt)

Item No. 46449



Formal Name:	benzyl ((S)-1-(((S)-5-guanidino-1-((4-methyl-2-oxo-2H-chromen-7-yl)amino)-1-oxopentan-2-yl)amino)-4-methyl-1-oxopentan-2-yl)carbamat, trifluoroacetate salt
Synonym:	Z-LR-AMC
MF:	$C_{30}H_{38}N_6O_6 \bullet XCF_3COOH$
FW:	578.7
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Ex./Em.	340-360/440-460 nm

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

Laboratory Procedures

Z-Leu-Arg-AMC (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Z-Leu-Arg-AMC (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Z-Leu-Arg-AMC (trifluoroacetate salt) is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

Z-Leu-Arg-AMC is a fluorogenic substrate for cysteine proteases, including falcipains and cathepsin K.[1,2] Upon enzymatic cleavage by cysteine proteases, 7-amino-4-methylcoumarin (AMC) is released and its fluorescence can be used to quantify cysteine protease activity. AMC displays excitation/emission maxima of 340-360/440-460 nm, respectively.

References

1. Drew, M.E., Banerjee, R., Uffman, E.W., *et al.* Plasmodium food vacuole plasmepsins are activated by falcipains. *J. Biol. Chem.* **283(19)**, 12870-12876 (2008).
2. Mellott, D.M., Tseng, C.-T., Drelich, A., *et al.* A clinical-stage cysteine protease inhibitor blocks SARS-CoV-2 infection of human and monkey cells. *ACS Chem. Biol.* **16(4)**, 642-650 (2021).

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
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