

# PRODUCT INFORMATION



## Ac-RLR-AMC (trifluoroacetate salt)

Item No. 26643

**Formal Name:** (S)-2-acetamido-5-guanidino-N-((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)pentanamide, 2,2,2-trifluoroacetate salt

**Synonyms:** Ac-Arg-Leu-Arg-AMC,  
Ac-Arg-Leu-Arg-7-amino-4-Methylcoumarin

**MF:** C<sub>30</sub>H<sub>46</sub>N<sub>10</sub>O<sub>6</sub> • XCF<sub>3</sub>COOH

**FW:** 642.8

**Purity:** ≥98%

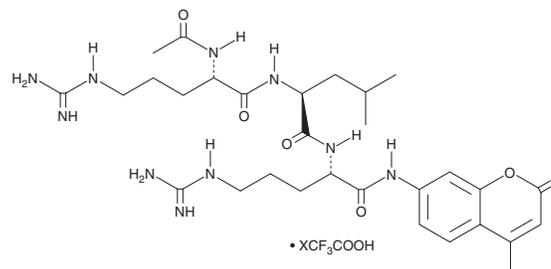
**UV/Vis.:** λ<sub>max</sub>: 231, 296, 328 nm

**Ex./Em. Max:** 380/440-460 nm

**Supplied as:** A lyophilized 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

Ac-RLR-AMC (trifluoroacetate salt) is supplied as a lyophilized solid. A stock solution may be made by dissolving the Ac-RLR-AMC (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Ac-RLR-AMC (trifluoroacetate salt) is soluble in acetic acid (5%).

### Description

Ac-RLR-AMC is a fluorogenic substrate for the 26S proteasome.<sup>1,2</sup> Upon cleavage, 7-amino-4-methylcoumarin (AMC) is released and its fluorescence can be used to quantify the trypsin-like activity of 26S proteasomes. AMC displays excitation/emission maxima of 380/440-460 nm, respectively.

### References

1. Kisselev, A.F. and Goldberg, A.L. Monitoring activity and inhibition of 26S proteasomes with fluorogenic peptide substrates. *Methods Enzymol.* **398**, 364-378 (2005).
2. Vilchez, D., Morantte, I., Liu, Z., *et al.* RPN-6 determines *C. elegans* longevity under proteotoxic stress conditions. *Nature* **489(7415)**, 263-268 (2012).

#### 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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