

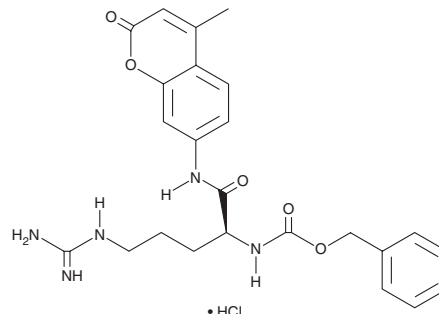
# PRODUCT INFORMATION



## Z-(L-Arg)-AMC (hydrochloride)

Item No. 30797

**CAS Registry No.:** 70375-22-3  
**Formal Name:** [(1S)-4-[(aminoiminomethyl)amino]-1-[[[4-methyl-2-oxo-2H-1-benzopyran-7-yl]amino]carbonyl]butyl]-carbamic acid, phenylmethyl ester, monohydrochloride  
**Synonyms:** Bz-Arg-AMC, N-benzyloxy-L-Arg-7-amido-4-methylcoumarin, N-benzoyl-L-Arg-AMC, Z-Arg(HCl)AMC  
**MF:**  $C_{24}H_{27}N_5O_5 \cdot HCl$   
**FW:** 502.0  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{max}$ : 327 nm  
**Ex./Em. Max:** 340-360/440-460 nm  
**Supplied as:** A 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

Z-(L-Arg)-AMC (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the Z-(L-Arg)-AMC (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Z-(L-Arg)-AMC (hydrochloride) is soluble in DMSO and dimethyl formamide. The solubility of Z-(L-Arg)-AMC (hydrochloride) in these solvents is approximately 1 mg/ml.

### Description

Z-(L-Arg)-AMC is a fluorogenic substrate for trypsin, cathepsin B, and cathepsin H.<sup>1,2</sup> Upon enzymatic cleavage by trypsin, cathepsin B, or cathepsin H, 7-amino-4-methylcoumarin (AMC) is released and its fluorescence can be used to quantify trypsin, cathepsin B, and cathepsin H activity. AMC displays excitation/emission maxima of 340-360/440-460 nm, respectively.

### References

1. Zimmerman, M., Ashe, B., Yurewicz, E.C., *et al.* Sensitive assays for trypsin, elastase, and chymotrypsin using new fluorogenic substrates. *Anal. Biochem.* **78**(1), 47-51 (1977).
2. Brindley, P.J., Kalinna, B.H., Dalton, J.P., *et al.* Proteolytic degradation of host hemoglobin by schistosomes. *Mol. Biochem. Parasitol.* **89**(1), 1-9 (1997).

#### 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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