

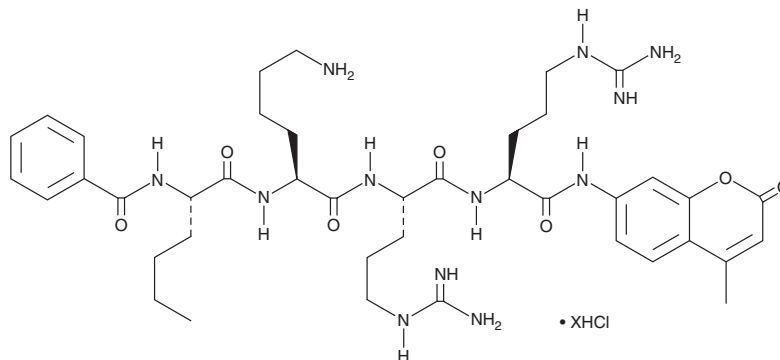
# PRODUCT INFORMATION



## Bz-Nle-KRR-AMC (hydrochloride)

Item No. 27710

**CAS Registry No.:** 863975-32-0  
**Formal Name:** N-benzoyl-L-norleucyl-L-lysyl-L-arginyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-L-argininamide, hydrochloride  
**Synonyms:** Benzoyl-Nle-Lys-Arg-Arg-AMC, Benzoyl-Nle-Lys-Arg-Arg-7-amino-4-methylcoumarin, Bz-Nle-Lys-Arg-Arg-AMC  
**MF:** C<sub>41</sub>H<sub>60</sub>N<sub>12</sub>O<sub>7</sub> • XHCl  
**FW:** 833.0  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 230, 299, 326 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

Bz-Nle-KRR-AMC (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the Bz-Nle-KRR-AMC (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Bz-Nle-KRR-AMC (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of Bz-Nle-KRR-AMC (hydrochloride) in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Bz-Nle-KRR-AMC (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Bz-Nle-KRR-AMC (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Bz-Nle-KRR-AMC (hydrochloride) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Bz-Nle-KRR-AMC is a fluorogenic peptide substrate for yellow fever virus (YFV) non-structural 3 (NS3) and dengue virus (DV) NS2B/3 serine proteases.<sup>1,2</sup> Upon enzymatic cleavage by YFV NS3 or DV NS2B/3 serine proteases, 7-amino-4-methylcoumarin (AMC) is released and its fluorescence can be used to quantify YFV NS3 or DV NS2B/3 serine protease activity. AMC displays excitation/emission maxima of 340-360/440-460 nm, respectively.

### References

1. Ulanday, G.E., Okamoto, K., and Morita, K. Development and utility of an in vitro, fluorescence-based assay for the discovery of novel compounds against dengue 2 viral protease. *Trop. Med. Health* **44:22**, (2016).
2. Löhr, K., Knox, J.E., Phong, W.Y., et al. Yellow fever virus NS3 protease: Peptide-inhibition studies. *J. Gen. Virol.* **88(Pt 8)**, 2223-2227 (2007).

#### 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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