

PRODUCT INFORMATION



Gly-Arg-AMC (hydrochloride)

Item No. 27580

CAS Registry No.: 70274-78-1

Formal Name: glycyl-N-(4-methyl-2-oxo-2H-1-benzopyran-7-yl)-L-argininamide, hydrochloride

Synonyms: Gly-Arg-7-amino-4-methylcoumarin, GR-AMC, GR-7-amino-4-methylcoumarin

MF: $C_{18}H_{24}N_6O_4 \cdot XHCl$

FW: 388.4

Purity: $\geq 98\%$

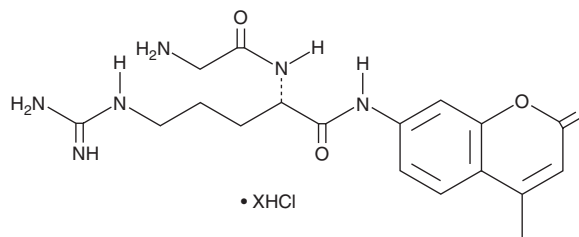
UV/Vis.: λ_{max} : 211, 229, 297, 327 nm

Ex./Em. Max: 340-360/440-460 nm, respectively

Supplied as: A solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



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

Laboratory Procedures

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

Gly-Arg-AMC (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Gly-Arg-AMC (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Gly-Arg-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

Gly-Arg-AMC is a fluorogenic substrate for cathepsin C.¹ Upon enzymatic cleavage by cathepsin C, 7-amino-4-methylcoumarin (AMC) is released and its fluorescence can be used to quantify cathepsin C activity. AMC displays excitation/emission maxima of 340-360/440-460 nm, respectively.

Reference

1. Rubach, J.K., Cui, G., Schneck, J.L., *et al.* The amino-acid substituents of dipeptide substrates of cathepsin C can determine the rate-limiting steps of catalysis. *Biochemistry* **51**(38), 7551-7568 (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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