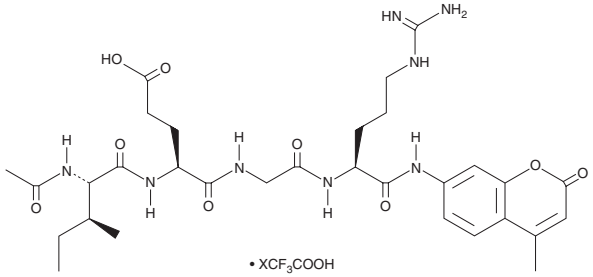
PRODUCT INFORMATION

Ac-Ile-Glu-Gly-Arg-AMC (trifluoroacetate salt)

Item No. 45784

Formal Name:	5-((3-chloro-6-methyl-5,5-dioxido-6,11-dihydrodibenzo[c,f][1,2]thiazepin-11-yl)amino) pentanoate, trifluoroacetate salt
Synonym:	Ac-Ile-Glu-Gly-Arg-7-amino-4-Methylcoumarin
Peptide Sequence:	Ac-IEGR-AMC
MF:	$C_{31}H_{44}N_8O_9 \bullet XCF_3COOH$
FW:	672.7
Purity:	≥98%
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

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

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of Ac-Ile-Glu-Gly-Arg-AMC (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. Ac-Ile-Glu-Gly-Arg-AMC (trifluoroacetate salt) is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

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

Reference

1. Hamzé, A., Martinez, J., and Hernandez, J.-F. Solid-phase synthesis of arginine-containing peptides and fluorogenic substrates using a side-chain anchoring approach. *J. Org. Chem.* **69(24)**, 8394-8402 (2004).

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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