



pGlu-Gly-Arg-7-Amino-4-Trifluoromethylcoumarin Trifluoroacetate Salt

Product Number **P 5615**
Storage Temperature $-20\text{ }^{\circ}\text{C}$

Product Description

Molecular formula: $\text{C}_{27}\text{H}_{28}\text{F}_6\text{N}_7\text{O}_8$
Molecular weight: 781.5

pGlu-Gly-Arg-7-Amino-4-Trifluoromethylcoumarin (pGlu-Gly-Arg-AFC) is a fluorogenic substrate designed for the determination of urokinase activity and tissue plasminogen activator (t-PA) activity. Upon substrate hydrolysis the free AFC produced can be quantified by fluorometric detection (excitation 400 nm, emission 505 nm) or by spectrophotometric detection at 380 nm (extinction coefficient = 12,600 at pH 7.2).

Urokinase and t-PA are fibrinolytic serine proteases that convert plasminogen to plasmin, which then dissolves fibrin.

Preparation Instructions

20 mM stock solutions (15.63 mg/ml) of pGlu-Gly-Arg-AFC can be prepared in DMSO. Also soluble in DMF.

Product Information

Storage/Stability

Store solid or solutions at $-20\text{ }^{\circ}\text{C}$. Material stable for at least one year, if stored as recommended.

Reference

1. Barrett, A.J., et. al. Mammalian Protease, **1**, 132 (1980).
2. Smith, R. E., et al., Direct photometric or fluorometric assay of proteinases using substrates containing 7-amino-4-trifluoromethylcoumarin. *Thromb. Res.*, **17**, 393-402 (1980).
3. Lojda, Z., The use of substrates with 7-amino-3-trifluoromethylcoumarin (AFC) leaving group in the localization of protease activities in situ. *Acta Histochem.*, **98**, 215-28 (1996).
4. Cejkova J. The appearance and possible role of plasminogen activator of urokinase type (u-PA) activity in the cornea related to soft contact lens wear in rabbits. *Doc. Ophthalmol.*, **95**, 165-79 (1998).

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