N-Methoxysuccinyl-Ala-Ala-Pro-Val
7-Amido-4-trifluoromethylcoumarin

Product Number M 4563
Storage Temperature –20 °C

Product Description
Molecular formula: C_{31}H_{38}N_{5}O_{9}F_{3}
Mol. wt.: 681.7

N-Methoxysuccinyl-Ala-Ala-Pro-Val 7-amido-4-trifluoromethylcoumarin (MeOSu-AAPV-AFC) is a fluorometric substrate suitable for the determination of elastase activity.

When Ac-AAPV-AFC is hydrolyzed, the free AFC produced in the reaction 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). When used in an enzyme assay with fluorescence detection, AFC has higher sensitivity than 4-methoxy-2-naphthylamide (MNA).

Elastase is a serine protease. It cleaves at C-terminal side of Gly, Ala, Ser, Val, Leu and Ile. It is unique among proteases because of its ability to hydrolyze native elastin, a substrate not attacked by trypsin, chymotrypsin or pepsin. MeOSu-AAPV-AFC may also be suitable for other serine proteases with the same peptide recognition sequence.

Preparation Instructions
Prepare stock 20 mM solutions in DMSO. Also soluble in DMF.

Storage/Stability
Store at –20 °C. Material stable for at least one year, if stored as recommended.

Store stock solutions in frozen aliquots at –20 °C. Stock solutions are stable 6-8 months under these conditions. Allow the material to warm to room temperature before use to ensure stability.

References

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