N-Succinyl-Ala-Ala-Pro-Phe 4-Methoxy-2-naphthylamide

Product Number S 5314
Storage Temperature –20 °C

Product Description
Molecular formula: C_{35}H_{41}N_{5}O_{8}
Mol. wt.: 659.7

N-Succinyl-Ala-Ala-Pro-Phe 4-methoxy-2-naphthylamide (Suc-AAPF-MNA) is a fluorogenic substrate suitable for the determination of chymotrypsins and cathepsin G.

When Suc-AAPF-MNA is hydrolyzed, the free MNA produced in the reaction can be quantified by fluorometric detection (excitation 340 nm, emission 425 nm). MNA can also be detected by colorimetric procedures because it couples with azo compounds to give a red color product (525 nm). MNA also couples with 5-nitrosalicylaldehyde to give a yellow to orange fluorescent product for acid proteases.

Chymotrypsin is a serine protease with preferential cleavage at Tyr-, Trp-, Phe-, and Leu- residues. Cathepsin G, a serine protease first discovered in human neutrophil leukocytes, has a specificity similar to that of chymotrypsin. Suc-AAPF-MNA may also be suitable for other serine proteases with the same peptide recognition sequence.

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Preparation Instructions
Prepare stock 20mM solutions in DMSO.

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

Store stock solutions in frozen aliquots at –20 °C.

References