Z-F-R-AMC
Fluorogenic Peptide Substrate VIII

Catalog Number: ES009
Lot Number: MLW02

Specifications and Use

Sequence	♦ Z-Phe-Arg-AMC. Z: N-carbobenzyloxy; 7-Amino-4-methylcoumarin.
Molecular Mass	♦ 612.6 Da.
Purity	♦ > 99% based on thin-layer chromatography.
Peptide Content	♦ 96.4%.
Quantity	♦ 50 mg. It is sufficient for approximately 7,870 assays using the recommended conditions.
Recommended Assay Conditions	♦ A fluorescence plate reader with excitation at 380 nm and emission at 460 nm is recommended for the measurement of the enzymatic activity. The substrate can be used at the final concentration of 100 μM in a total of 100 μL reaction mixture.
Applications	♦ Hydrolysis of Arg-AMC amide bond releases 7-amino-4-methyl coumarin (AMC), a highly fluorescent group. ♦ It is an excellent substrate for papain, a cysteine protease often used in characterization of cysteine protease inhibitors.
Formulation	♦ Supplied as a stock solution in dimethyl sulfoxide (DMSO) with a concentration of 100 mg/mL by mass or 157.4 mM with consideration of the peptide content.
Storage	♦ Samples are stable for up to twelve months from date of receipt at -20° C to -70° C. ♦ The substrate can be aliquoted and stored at -20° C to -70° C **in a manual defrost freezer** for six months. ♦ **Protect from exposure to direct light.** ♦ **Avoid repeated freeze-thaw cycles.**

R&D Systems, Inc.
1-800-343-7475

10/6/09