



H-Met-Gly-Pro-AMC *Fluorogenic Peptide Substrate*

Catalog Number: ES017
Lot Number: SCR01

Specifications and Use

- Sequence** ♦ H-Met-Gly-Pro-AMC : HCl (MGP-AMC). 7-Amino-4-methylcoumarin.
- Molecular Mass** ♦ 497 Da including HCl.
- Purity** ♦ > 97% based on TLC.
- Peptide Content** ♦ > 97% including HCl.
- Quantity** ♦ 5 mg. It is sufficient for approximately 400 assays using the substrate at 250 μ M and the volume at 100 μ L.
- 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. Depending upon individual enzymes, the substrate may be used at the final concentrations between 100 to 500 μ M in a total of 100 μ L reaction mixture.
- Applications** ♦ Hydrolysis of Pro-AMC amide bond releases AMC, a highly fluorescent group.
♦ It is an excellent substrate for methionine aminopeptidases. After the enzymatic removal of the Met residue, the substrate can be cleaved by DPPIV/CD26-like enzymes. Please see the individual enzyme insert for the specific assay condition.
- Formulation** ♦ Supplied as a stock solution in dimethyl sulfoxide (DMSO) with a concentration of 10 mg/mL or 20 mM.
♦ Centrifuge the vial before opening to recover entire contents of the vial. Due to possible sublimation during storage, the buffer volume may decrease over time, however, the product is sold by mass and the amount of substrate will remain constant. To ensure quantitative recovery, we suggest the initial dilution be made in the original vial.
- Shipping** ♦ The substrate is shipped with ice packs. Upon receiving, store it immediately at the temperature recommended below.
- Storage** ♦ Samples are stable for up to six months from date of receipt at -20° C to -70° C **in a manual defrost freezer**.
♦ The substrate can be aliquoted and stored at above conditions for six months.
♦ **Protect from exposure to direct light.**
♦ **Avoid repeated freeze-thaw cycles.**

Use of MGP-AMC with R&D Systems methionine aminopeptidases

Protease	Catalog #
Recombinant Human METAP1	3537-ZN
Recombinant Human METAP2	3795-ZN
Recombinant Human MAP1D	4714-ZN