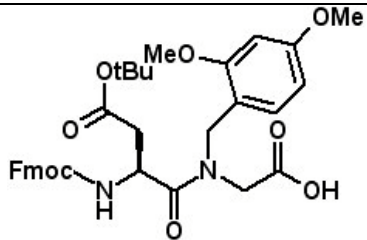
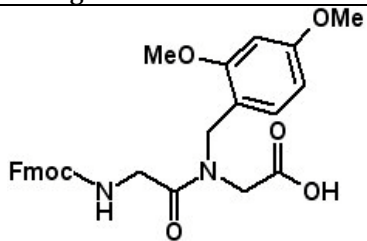
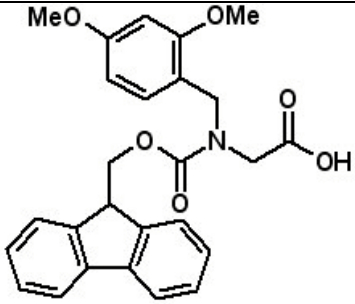


## AAPPTec Introduces New Products in 2010

Catalog Number	Product	Quantity	Price	Structure
ZFR105	Z-Phe-Arg-AMC	25mg 50mg 250mg 500mg	\$60 \$110 \$440 \$795	
<p>AMC: 7-Amino-4-methylcoumarin AMC is highly fluorescent as a free amine but its fluorescence is greatly reduced when it is acylated. It is incorporated into substrates used to study enzymes. Monitoring the increase of fluorescence yields information on the enzyme kinetics. This is a fluorogenic substrate for various serine proteases including cathepsins, kallikrein and plasmin. Absorption/emission of substrate = 330/390 nm (weak fluorescence) Absorption/emission of end product (AMC) = 342/441 nm (strong fluorescence).</p>				
AFK141	Fmoc-Lys(ivDde)-OH	1g 5g	\$145 \$535	
<p>The ivDde group can be selectively removed with hydrazine in the presence of acid labile groups such as t-butyl and trityl based protecting groups. Fmoc-Lys(ivDde)-OH is especially useful for preparing peptides selectively modified on the Lys sidechain, such as peptides labeled peptides, PEGylated peptides or peptides cyclized through the Lys sidechain (Chhabra, S.R.; et al. <i>Tetrahedron Lett.</i> <b>1998</b>, 39, 1603-9). As examples of its use, Fmoc-Lys(ivDde)-OH was used to prepare a chlorothalonil peptide conjugate with the pesticide conjugated to the peptide through the Lys sidechain (Hrenn, H.; et al. <i>Tetrahedron Lett.</i> <b>2003</b>, 44, 1911-3). Fmoc-Lys(ivDde)-OH was also used to palmitoylate selected Lys residues while leaving other Lys residues unmodified for subsequent labeling (Olschewski, D.; et al. <i>Chem. Biol.</i> <b>2007</b>, 14, 994-1006).</p>				
AFK104	Fmoc-Lys(Biotin)-OH	1g 5g	\$250 \$895	
<p>Fmoc-Lys(Biotin)-OH is useful for preparing specifically labeled peptides to use as probes. The biotinylated peptides are detected using labeled avidin or streptavidin which tightly bind to biotin. Because labeled avidin or streptavidin are labeled in multiple sites, the binding of labeled avidin to a biotinylated probe produces an amplified response compared to the direct incorporation of the label into the peptide. Biotinylation can modify the activity of a peptide. Recently, biotinylation of lysine residues in exendin-4 was reported to improve the hypoglycemic effects of the peptide. Significantly, incorporation of Lys(biotin) led to an product that could be taken orally. (Jin, C.H., et al. <i>J. Control Release</i> <b>2009</b>, 133, 172.)</p>				

NGD105	Fmoc-Asp(OtBu)-(Dmb)Gly-OH	1g 5g	\$90 \$360	
<p>The N-Dmb group disrupts hydrogen bonding in the peptide backbone and reduces aggregation. Incorporated into long or difficult peptides, N-Dmb dipeptides can improve peptide yield and purity. When the Dmb protecting group is attached to the amino acid preceding Asp in a peptide, Dmb blocks aspartimide formation and the side products resulting from aspartimide formation (Quibell, M.; et al. <i>J. Chem. Soc., Chem. Commun.</i> <b>1994</b>, 2343-4). In SPPS the N-Dmb group is removed with TFA during peptide cleavage from the resin.</p>				
NGG101	Fmoc-Gly-(Dmb)-Gly-OH	1g 5g	\$90 \$360	
<p>The N-Dmb group disrupts hydrogen bonding in the peptide backbone and reduces aggregation. Incorporated into long or difficult peptides, N-Dmb dipeptides can improve peptide yield and purity. In SPPS the N-Dmb group is removed with TFA during peptide cleavage from the resin. Fmoc-Gly-(Dmb)Gly-OH was utilized in the preparation of a 61-amino acid peptide (S. Zahariev, et al. <i>J. Pept. Sci.</i> <b>2005</b>, 11, 17-28).</p>				
AFG105	Fmoc-(Dmb)Gly-OH	1g 5g	\$90 \$360	
<p>The N-Dmb group disrupts normal peptide backbone hydrogen bonding that leads to aggregation and difficult peptide synthesis. Fmoc-(Dmb)Gly-OH is a useful substitute for Fmoc-Gly-OH in preparing long or difficult peptides. The Dmb group is removed with TFA during peptide cleavage from the resin (S. Zahariev, et al. in 29<sup>th</sup> European Peptide Symposium: Proceedings, 2006, paper 39).</p>				

**For pricing on larger quantities, please contact us at 888.692.9111 or [sales@aaptec.com](mailto:sales@aaptec.com).**