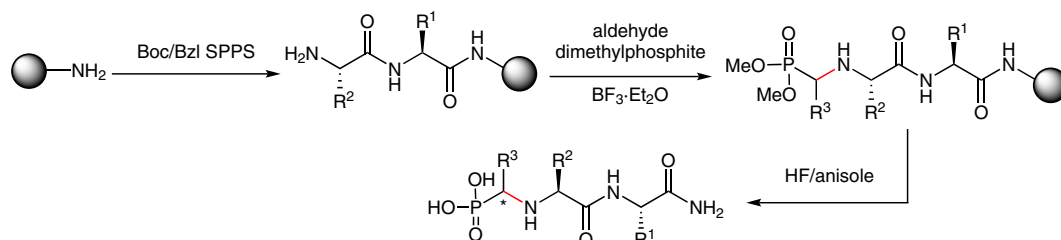


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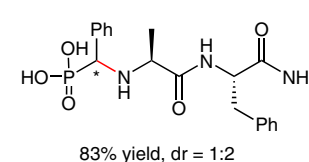
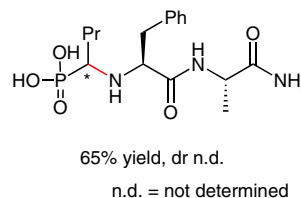
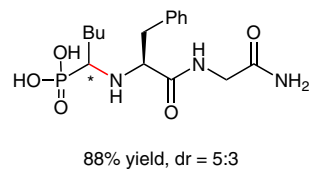
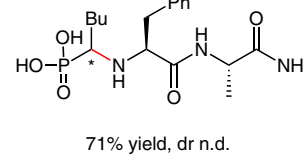
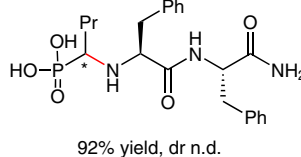
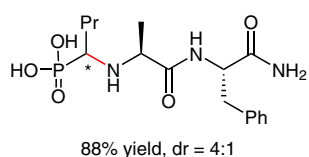
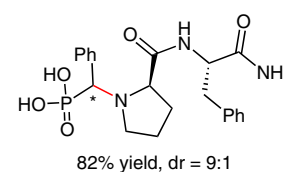
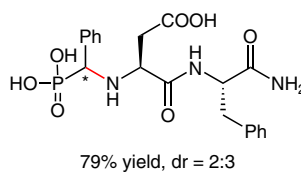
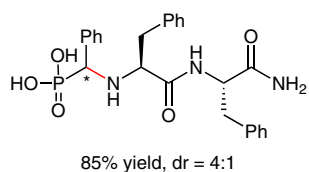
An Expedient Method for the Solid-Phase Synthesis of  $\alpha$ -Aminoalkyl Phosphonopeptides

*Tetrahedron Lett.* **2002**, 43, 4103–4106, DOI: 10.1016/S0040-4039(02)00695-0.

## Solid-Phase Synthesis of $\alpha$ -Amino Alkyl or Aryl Phosphonopeptide Derivatives



### Selected examples:



**Significance:** Amino phosphonopeptides are highly significant molecules in biological systems as potent antimicrobial agents and as inhibitors of various enzymes. In 2002, Houghten and co-workers developed a solid-phase synthesis of  $\alpha$ -aminoalkyl phosphonopeptides by using an aldehyde dimethylphosphite in the presence of the Lewis acid  $\text{BF}_3 \cdot \text{Et}_2\text{O}$ .

**Comment:** The developed method is one of the simplest and practically most viable methods for the generation of series of  $\alpha$ -aminoalkyl or aryl phosphonopeptide derivatives in high yields with moderate stereoselectivity. The method can be used for the synthesis of libraries of peptide or non-peptide phosphonates.