

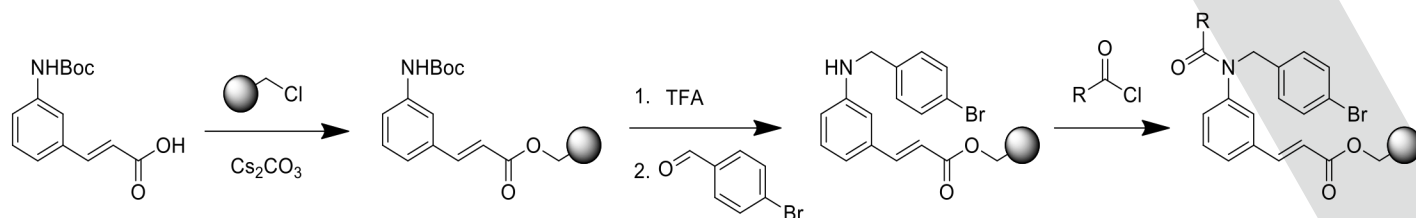
Merrifield

Merrifield resin is a stalwart of solid phase peptide chemistry. It is a chloromethyl functional resin that can be used for direct immobilization of carboxylic acids, including N-protected Amino Acids. Typically, N-Boc Amino Acids are attached to the resin scaffold via their cesium salts. The resulting Boc-Amino esters are treated with a TFA/DCM mixture to expose the free amine, which is then utilized in subsequent amide coupling/deprotection/coupling sequences, thereby generating the desired peptide on solid support. The advantage is that all excess reagents and byproducts of the coupling reactions are washed away from the solid support, isolating the product cleanly. Merrifield resin is cleaved from the desired peptide via a number of conditions, but most commonly is the use of strong acids such as HF and trifluoromethanesulfonic acid. Resulting peptides are isolated as quaternary ammonium salts and it is suggested to treat them with MP-Carbonate to liberate the free amine prior to further manipulation or storage.

The Merrifield resin has a gel-type polystyrene framework. The resin provides access to a broad range of solvents, including DMF and DMA.

In situ modification of Merrifield resin with sodium iodide (NaI) results in a highly efficient scavenger resin for triphenylphosphine and triphenylphosphine oxide, easily removing these problematic chemicals from complex reaction mixtures.

General Reaction



References

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Solvent Compatibility

THF
DMF
DMA
DCE
DCM
ACN

Ordering Information

PS-Merrifield

Loading: 1.0-1.2 mmol/g	10g	SPPS 15-10
	25g	SPPS 15-25
Bead size: 100-200 mesh	100g	SPPS 15-100
	1Kg	SPPS 15-1Kg