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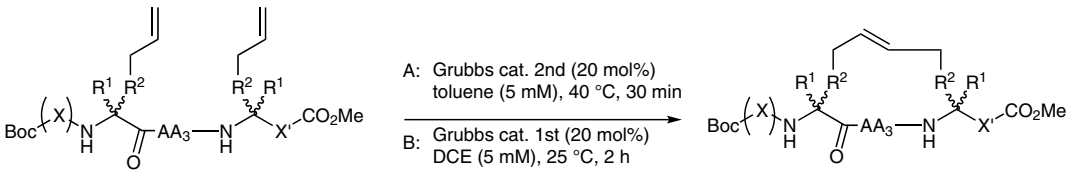
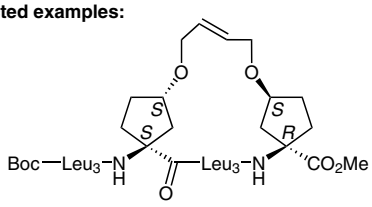
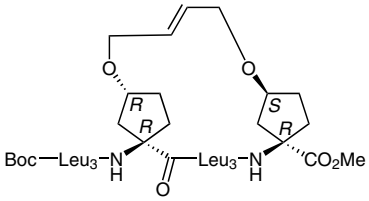
*E*-Selective Ring-Closing Metathesis in α-Helical Stapled Peptides Using Carbocyclic α,α-Disubstituted α-Amino Acids
*Org. Lett.* **2022**, *24*, 1049–1054, DOI: 10.1021/acs.orglett.1c04256.

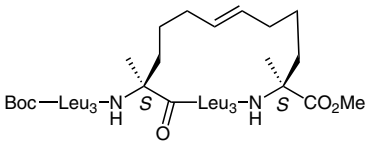
# Cyclopeptide Synthesis by Ring-Closing Metathesis

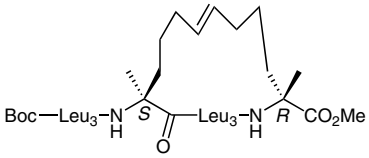


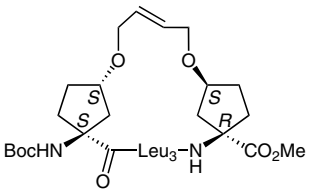

**Selected examples:**

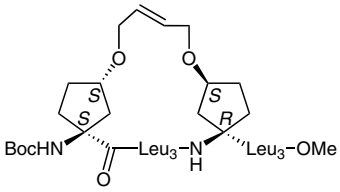

conditions A: 96% yield, *E*/*Z* = 24:1

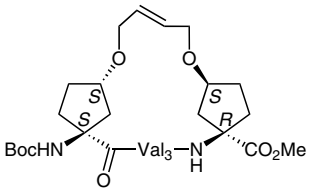

conditions A: 76% yield, *E*/*Z* = 6:1


conditions A: 53% yield, *E*/*Z* = 1:2.2
conditions B: 73% yield, *E*/*Z* = 1:1.1


conditions A: 94% yield, *E*/*Z* = 1:1
conditions B: 99% yield, *E*/*Z* = 1.3:1


conditions A: 75% yield, *E*/*Z* = 26:1


conditions A: 98% yield, *E*/*Z* = 40:1


conditions B[a]: 95% yield, *E*/*Z* = 16:1

[a] $CH_2Cl_2$ was used as solvent.

**Significance:** Cyclopeptides are key moieties widely present in a number of bioactive products, including some with clinical applications. The authors developed ring-closing metathesis in α-helical stapled peptides.

**Comment:** The ring-closing metatheses of α-helical stapled peptides containing leucine or valine residues proceeded in moderate to high yields, generally in an *E*-selective manner.

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**Category**
**Peptide Chemistry**

**Key words**
**cyclic peptides**
**ring-closing metathesis**
**stereoselectivity**
**peptide stapling**

Synfact of the Month