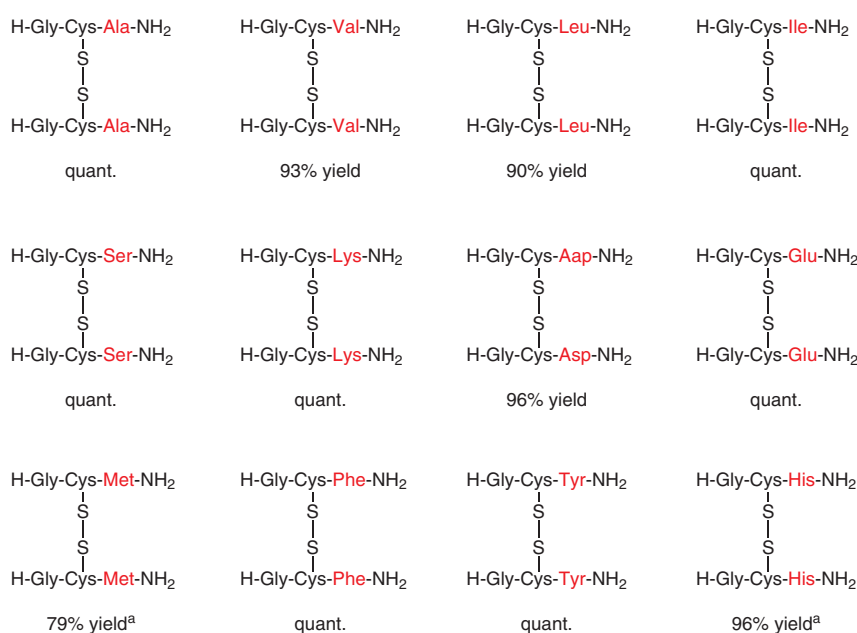
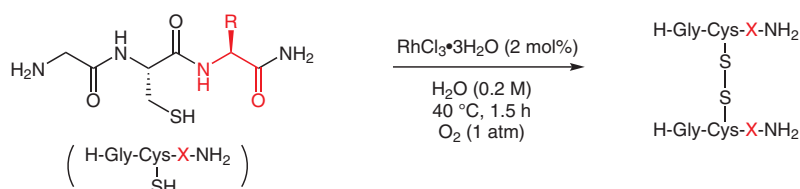


Rhodium-Catalyzed Formation of Disulfide Bonds in Water



^a RhCl₃·3H₂O (5 mol%) was used.

Significance: The disulfide bond is widely found in peptides and proteins, and it is important for the formation of the structures of proteins. The authors report a rhodium-catalyzed oxidation reaction to form disulfide bonds in water.

Comment: Various peptide disulfides can be synthesized in water by using a rhodium(III) catalyst. No protecting groups are needed for these peptides in the reactions. The yields of the products are almost quantitative.

Category

Peptide Chemistry

Key words

cysteine peptides

rhodium catalysis

disulfides

oxidation

Synfact
of the
Month