

*Supplementary information for*

**Development of fluorescent probes based on protection-  
deprotection of the key functional groups for biological  
imaging**

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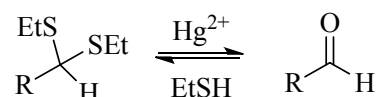
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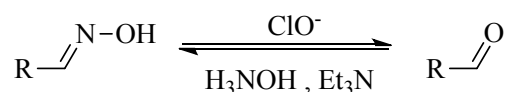
The representative examples of the general protection and deprotection of various systems mentioned in the review. For more information, please refer to Greene's protective groups in organic synthesis, fourth edition, Peter G. M. Wuts, Pfizer, and Theodora W. Greene, The Rowland Institute for Science. Wiley-interscience, A John Wiley & Sons, Inc. 2007.

## 2. Aldehyde group protection-deprotection

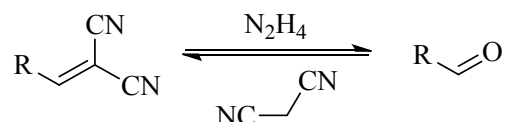
### 2.1 1,3-dithianes



### 2.2 Imino groups



### 2.3 Methylenemalononitrile groups

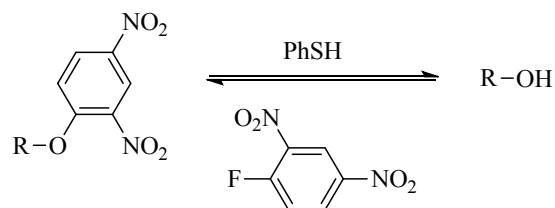


## 3. Hydroxyl group protection-deprotection

### 3.1 Silyl ethers

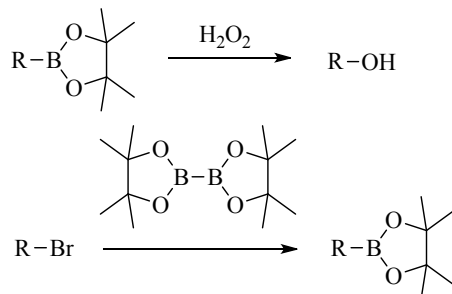


### 3.2 Dinitrobenzenesulfonates or 2,4-dinitrophenyl ethers

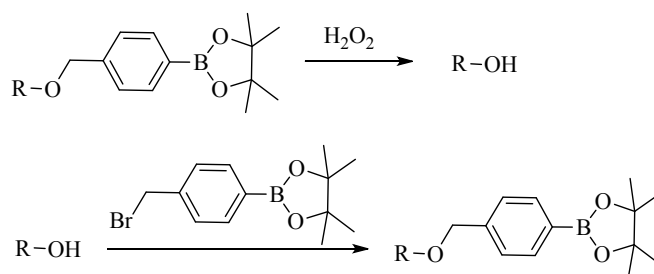


### 3.3 Boronate Esters

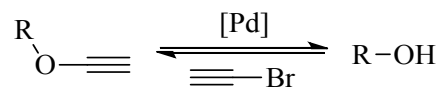
#### 3.3.1



#### 3.3.2

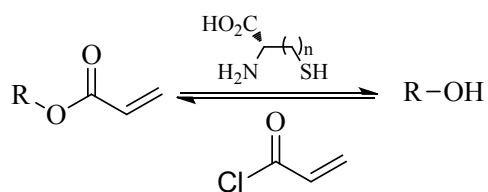


### 3.4 Ethers containing an alkynyl or alkenyl moiety

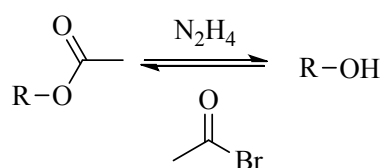


### 3.5 Esters

#### 3.5.1

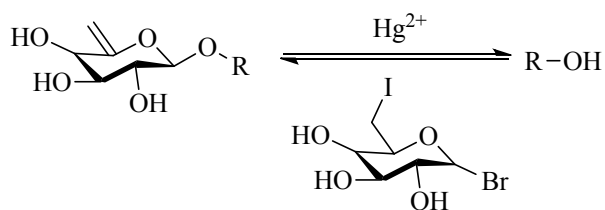


#### 3.5.2

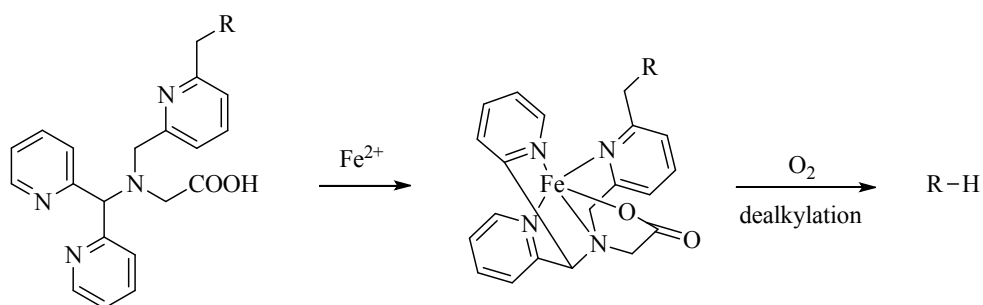


### 3.6 Other hydroxyl protective groups

#### 3.6.1

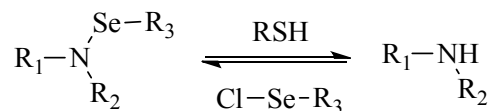


#### 3.6.2

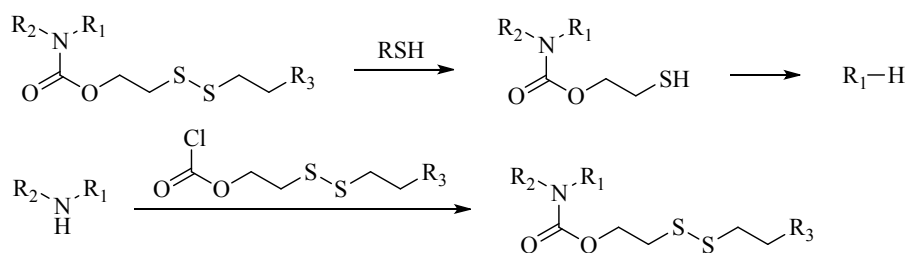


## 4. Amino group protection-deprotection

### 4.1 Se-N bond



### 4.2 Carbamates or amides containing a S-S bond



### 4.3 2,4-dinitrobenzenesulfonamides and other sulphonamides

