

Materials List for:

# Solid-phase Synthesis of [4.4] Spirocyclic Oximes

Cody R. Drisko<sup>1</sup>, Silas A. Griffin<sup>1</sup>, Kevin S. Huang<sup>1</sup>

<sup>1</sup>Department of Biology and Chemistry, Azusa Pacific University

Correspondence to: Kevin S. Huang at [shuang@apu.edu](mailto:shuang@apu.edu)

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## Materials

| Name                                                           | Company            | Catalog Number     | Comments                                                                |
|----------------------------------------------------------------|--------------------|--------------------|-------------------------------------------------------------------------|
| <b>Chemicals</b>                                               |                    |                    |                                                                         |
| REM Resin                                                      | Nova Biochem       | 8551010005         | Solid Polymer Support; 1.1 mmol/g loading                               |
| Furfurylamine                                                  | Acros Organics     | 119800050          | Reagent                                                                 |
| Dimethylformamide (DMF)                                        | Sigma-Aldrich      | 227056             | Solvent                                                                 |
| Dichloromethane (DCM)                                          | Sigma-Aldrich      | 270997             | Solvent                                                                 |
| Methanol                                                       | Sigma-Aldrich      | 34860              | Solvent                                                                 |
| <i>trans</i> -4-bromo- $\beta$ -nitrostyrene                   | Sigma-Aldrich      | 400017             | Nitro-olefin solid                                                      |
| <i>trans</i> -3,4-dimethoxy- $\beta$ -nitrostyrene             | Sigma-Aldrich      | S752215            | Nitro-olefin solid                                                      |
| <i>trans</i> -2,4-dichloro- $\beta$ -nitrostyrene              | Sigma-Aldrich      | 642169             | Nitro-olefin solid                                                      |
| <i>trans</i> - $\beta$ -nitrostyrene                           | Sigma-Aldrich      | N26806             | Nitro-olefin solid                                                      |
| Triethylamine (TEA)                                            | Sigma-Aldrich      | T0886              | Solvent                                                                 |
| Trimethylsilyl chloride (TMSCl)                                | Sigma-Aldrich      | 386529             | Reagent; CAUTION - highly volatile; creates HCl gas                     |
| Tetra-n-butylammonium fluoride (TBAF) in Tetrahydrofuran (THF) | Sigma-Aldrich      | 216143             | Reagent                                                                 |
| Tetrahydrofuran (THF)                                          | Sigma-Aldrich      | 401757             | Reagent                                                                 |
| 1-Bromooctane                                                  | Sigma-Aldrich      | 152951             | Alkyl-halide                                                            |
| Iodomethane                                                    | Sigma-Aldrich      | 289566             | Alkyl-halide                                                            |
| Allylbromide                                                   | Sigma-Aldrich      | 337528             | Alkyl-halide                                                            |
| Benzylbromide                                                  | Sigma-Aldrich      | B17905             | Alkyl-halide                                                            |
| <b>Glassware/Instrumentation</b>                               |                    |                    |                                                                         |
| 25 mL solid-phase reaction vessel                              | Chemglass          | CG-1861-02         | Glassware with filter                                                   |
| Thermo Scientific Nicole iS5                                   | Thermo Scientific  | IQLAADGAAGFAHDMAZA | Instrument                                                              |
| AVANCE III NMR Spectrometer                                    | Bruker             | N/A                | Instrument; 300 MHz; Solvents: CDCl <sub>3</sub> and CD <sub>3</sub> OH |
| Wrist-Action Shaker Model 75                                   | Burrell Scientific | 757950819          | Instrument                                                              |