Table 1. The effect of several solvents, temp and mol% of TBAB on synthesis of **5a**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Entry | Catalyst | Temperature (ᴼC) | Solvent | Time (min) | | Yield (%) | |
| 1 | TBAB (5mol %) | 50 | THF | 65 | 36 | |
| 2 | TBAB (5mol %) | 50 | MeOH | 65 | 54 | |
| 3 | TBAB (5mol %) | 50 | CH2Cl2 | 65 | 25 | |
| 4 | TBAB (5mol %) | 50 | CH3CN | 65 | 31 | |
| 5 | TBAB (5mol %) | 50 | DMF | 65 | 51 | |
| 6 | TBAB (5mol %) | 50 | H2O | 65 | 56 | |
| 7 | TBAB (5mol %) | 50 | EtOH:H2O(1:1) | 65 | 61 | |
| 8 | No Catalyst | RT | EtOH | 30 | trace | |
| 9 | No Catalyst | 50 | EtOH | 30 | 56 | |
| 10 | No Catalyst | Reflux | EtOH | 30 | 81 | |
| 11 | TBAB (5mol %) | RT | EtOH | 65 | 38 | |
| 12 | TBAB (5mol %) | 40 | EtOH | 65 | 65 | |
| **13** | **TBAB (5mol %)** | **50** | **EtOH** | **65** | **90** | |
| 14 | TBAB (5mol %) | 60 | EtOH | 65 | 89 | |
| 15 | TBAB (5mol %) | Reflux | EtOH | 65 | 85 | |

Phenyglyoxal (1mmol), barbituric acid (1mmol) and 1,3-dimethyl-6-aminouracil (1mmol) EtOH (5 mL)