

Reaction scheme for the synthesis of 3j-v from 1j-v:

Starting material **1j-v** (a substituted benzene ring with a vinyl group and a cyano group) reacts with the following reagents:

- $\text{Cu}(\text{MeCN})_4\text{PF}_6$ (4 mol%)
- L5** (6 mol%)
- NaOtBu (30 mol%)
- B_2pin_2 (1.5 equiv)
- $t\text{AmOH}$ (2.0 equiv)

The reaction is carried out in Et_2O at room temperature (rt) for 18 hours.

The intermediate product is shown in brackets, followed by an arrow labeled $[\text{O}]$ indicating oxidation.

The final product is **3j-v** (a substituted benzene ring with a hydroxyl group and a cyano group).

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