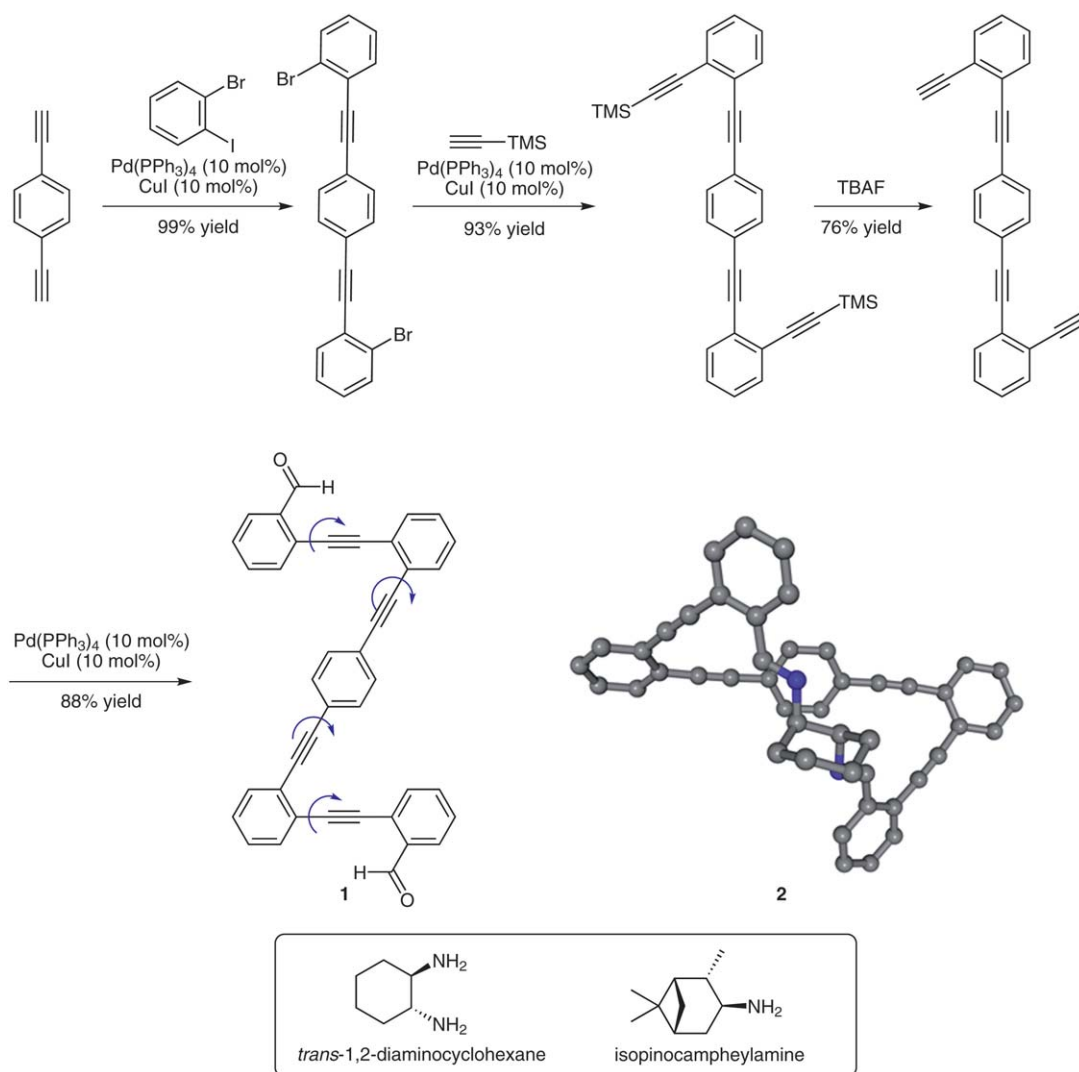


A Well-Oiled Stereodynamic Probe



Significance: A series of Sonogashira cross-coupling reactions is employed in the synthesis of the aryl-acetylene stereodynamic probe **1**, which was obtained in 62% overall yield. While **1** is achiral, condensation with chiral di- or monoamines produces axially chiral diimines (e.g. **2**). Because of the unhindered rotation in **1** (blue arrows) the central-to-axial chirality induction is essentially 'frictionless'.

Comment: Extraordinary chirality amplification and strong Cotton effects were observed, and were used for in situ induced circular dichroism (ICD) analysis of a variety of chiral amines. CD amplitudes showed linear dependency on % ee, and enantiomeric excess was determined within 4% of the actual values for *trans*-1,2-diaminocyclohexane, and within 5.5% for the isopinocampheylamine.