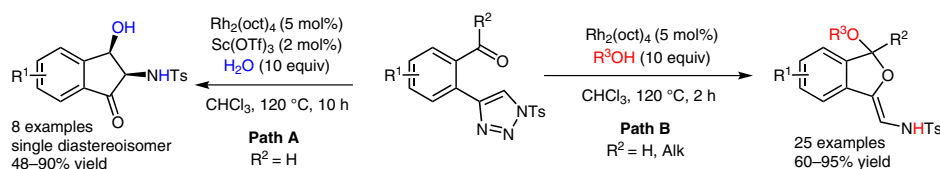


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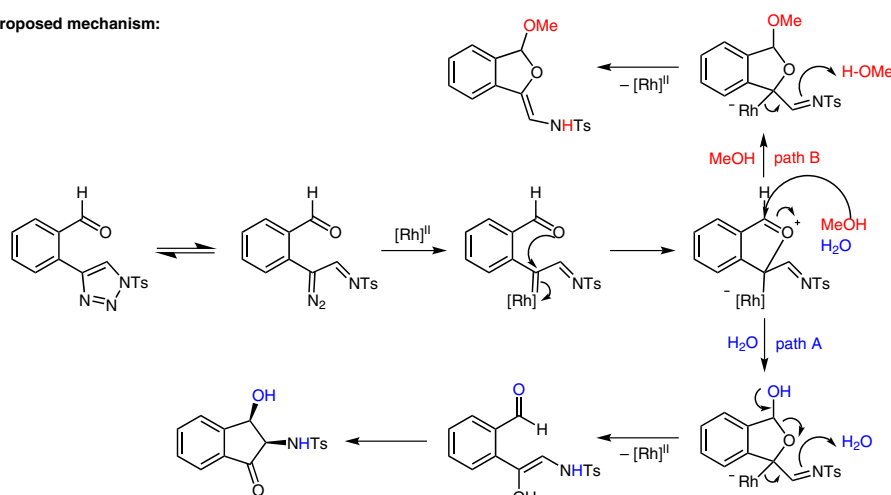
Tunable and Chemoselective Syntheses of Dihydroisobenzofurans and Indanones via Rhodium-Catalyzed Tandem Reactions of 2-Triazole-benzaldehydes and 2-Triazole-alkylaryl Ketones

Org. Lett. **2014**, *16*, 5588–5591.

Divergent Reactivity of 2-Triazole Benzaldehydes under Rhodium Catalysis



Proposed mechanism:



Significance: *N*-Sulfonyl 1,2,3-triazoles can serve as convenient diazo compound precursors, when reacted with a suitable rhodium(II) catalyst. In the present report, the authors present the reaction of 2-triazole benzaldehydes and 2-triazole alkylaryl ketones with water and alcohols. The products generated are either valuable 2-amino-3-hydroxyindanones or dihydroisobenzofurans.

Comment: To support the existence of an oxonium intermediate, the starting triazole was reacted with the rhodium catalyst for two hours in the absence of nucleophiles. Upon addition of water, alcohol and $\text{Sc}(\text{OTf})_3$, products arising from paths A and B were formed in comparable yield, suggesting the presence of this common intermediate.

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Key words

triazoles

rhodium

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indanones