Radical Reaction of Sulfonyl Chloride in Access to Vinyl Sulfones

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Vinyl sulfones are extensively used as a building blocks for total synthesis of natural products^[1]. They can be prepared by olefination reactions^[2], elimination from α - or β -substituted sulfones^[3], oxidation of vinyl sulfides^[4] or others.

Their preparation from terminal alkynes is highly attractive. However, such transformations have only been reported *via* hydrometallation process^[5].

Herein we describe selective introduction of vinyl sulfones. We generate the sulfonyl radical from p-toluenesulfonyl chloride and add it onto alkyne.



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