Synthesis of AMG 837

**Significance:** A new versatile method for the iridium-catalyzed asymmetric substitution of racemic allylic alcohols is exemplified by the depicted synthesis of AMG 837, a GPR40 receptor agonist that is of interest for the treatment of type 2 diabetes.

**Comment:** The allylic alkynylation (27 examples) typically provides excellent branched-to-linear regioselectivity (rr > 50:1) and high enantioselectivity (>99%). The scope of the allylic alkynylation was explored using 12 allylic alcohols and 15 potassium alkynyltrifluoroborates.