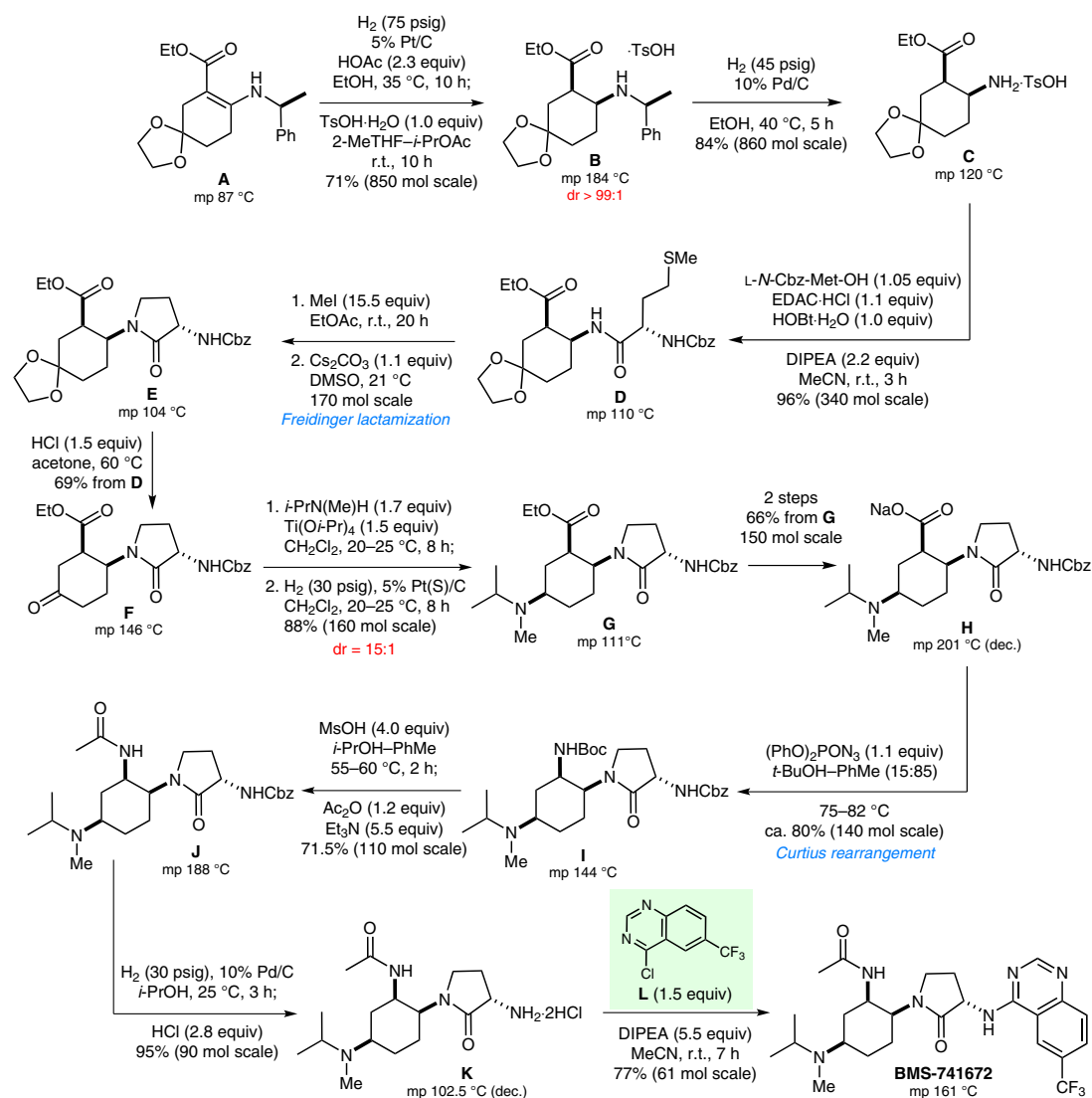


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 Stereoselective Bulk Synthesis of CCR2 Antagonist BMS-741672: Assembly of an All-*cis* (*S,R,R*)-1,2,4-Triaminocyclohexane (TACH) Core via Sequential Heterogeneous Asymmetric Hydrogenations
Org. Process Res. Dev. **2016**, *20*, 1949–1966.

Synthesis of BMS-741672



Significance: BMS-741672 is a chemotactic chemokine receptor 2 (CCR2) antagonist that is of interest for the treatment of inflammatory, cardiovascular, and metabolic diseases. A salient feature of the synthesis depicted is the construction of the all-*cis* 1,2,4-triaminocyclohexane core. This route delivered 50 kg of the target in 12 steps and in 9% overall yield.

Comment: A platinum-catalyzed reduction of β -enaminoester **A** using (*S*)- α -methylbenzylamine as a low-cost chiral template and reductive amination of the 3,4-*cis*-disubstituted cyclohexanone **F** with a secondary amine on a sulfided platinum catalyst established the stereochemistry in the trisubstituted cyclohexane **G**.

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