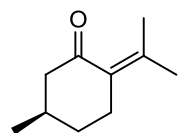
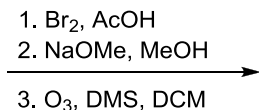


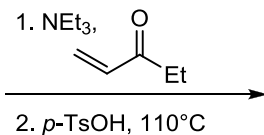
Enantioselective Total Synthesis of Hispidospermidine



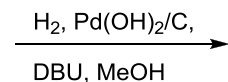
(*R*)-pulegone



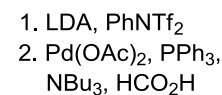
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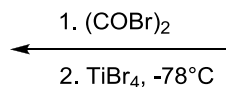
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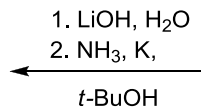
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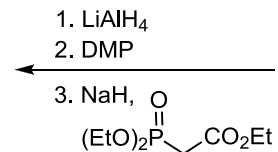
G



F



E

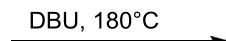


D

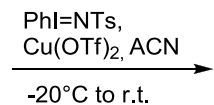
side product

+

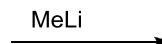
H



J

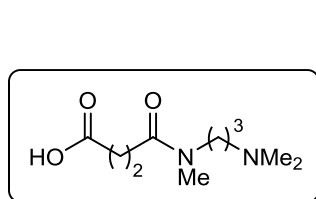


K

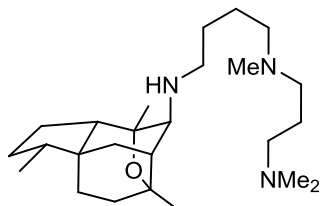


L

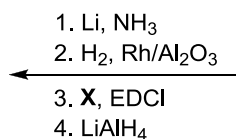
main product
ratio = 1:3



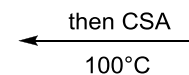
X



(-)-hispidospermidine



N



M

