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## Facile synthesis of 3-amino substituted piperidines from L-glutamic acid

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Multi-step route toward the synthesis of enantiomerically pure 3-(*N*-Boc amino) piperidine derivatives is described starting from natural  $\alpha$ -amino acid *i.e.* L-glutamic acid. This route involves the esterification of both carboxylic acid groups in one-pot to give diester followed by  $\text{NaBH}_4$  reduction to give diol which in turn is converted to various piperidines *via* the reaction of corresponding ditosylate with different amines. The overall yields of substituted piperidine have been found to be 44% to 55% starting from L-glutamic acid.

**Keywords:** 3-(*N*-Boc amino) piperidines, L-Glutamic acid,  $\text{NaBH}_4$  reduction, Cyclization, Amines