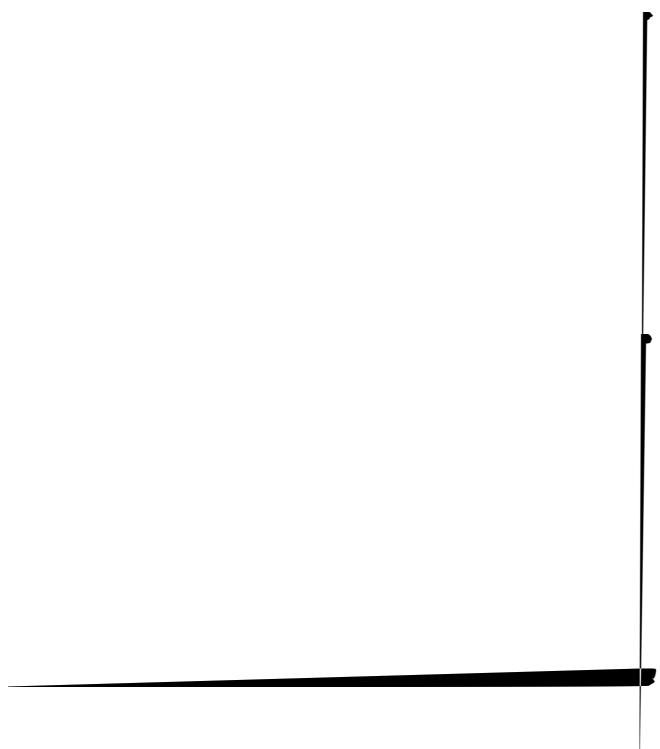


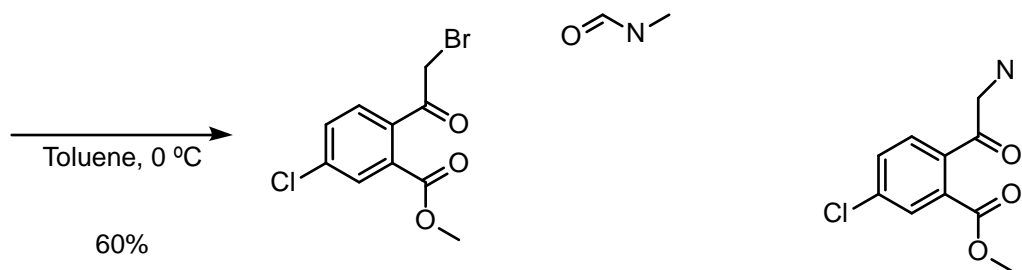
from "Synthetic approaches to the 2014 new drugs"  
Flick, A. C.; Ding, H. X.; Leverett, C. A.; Kyne Jr. R. E.; Liu, K. K.-C.; Fink, S. J.; O'Donnell, C. J.  
J. Med. Chem., 24 (9), 1937 – 1980

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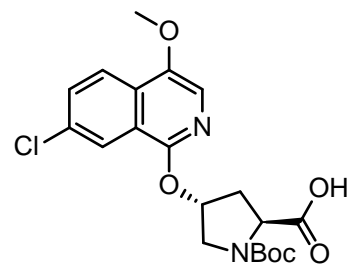
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1) -Boc-3-(R)-hydroxy-L-proline  
KO -Bu, DMSO, 10 °C

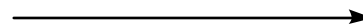
2) aq. HCl to pH ~5,  
EtOAc, 25 °C

59% (2 steps)





96%



53% (3 steps)

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