The invention relates to a process for the synthesis of the compound of formula (I):

$$H_3CO$$
 $N-R$  (I),

wherein R represents a para-methoxybenzyl (PMB) group or the following group:

$$C$$
 $H_2$ 
 $H_3C$ 
 $OCH_3$ 
 $OCH_3$ 

characterized in that the compound of formula (VII):

wherein R is as defined above, is subjected to a reduction reaction, in the presence of  $LiBH(Et)_3$ , in an organic solvent to yield the compound of formula (I).

It is applied in the synthesis of ivabradine and addition salts thereof with a pharmaceutically acceptable acid.

Claims: 11