

METHOD FOR PRODUCING α -SUBSTITUTED CYSTEINE OR SALT
THEREOF OR SYNTHETIC INTERMEDIATE OF α -SUBSTITUTED CYSTEINE

ABSTRACT

5 According to the present invention, it becomes possible to perform a process
for converting into an α -substituted cysteine represented by general formula (1) or a
salt thereof at low cost and on an industrial scale by employing a process that is
routed through a compound represented by general formula (3) to a compound
represented by general formula (6). Particularly, by employing a process that is
10 routed through a compound represented by general formula (7-2), it becomes
possible to detach a tert-butyl protection group in a simple manner and to produce the
compound represented by general formula (1) with high purity. Furthermore, by
employing a process that is routed through tert-butylthiomethanol or a process that is
routed through a compound represented by general formula (9), it becomes possible
15 to produce a compound represented by general formula (2) without generating
bischloromethylether that is an oncogenic substance. In the production of an α -
substituted-D-cysteine or a salt thereof, it becomes possible to perform a process for
converting the compound represented by general formula (2) into a compound
represented by general formula (3S) in one step by allowing an enzyme or the like to
20 act on the compound represented by general formula (2).

Figure 1.