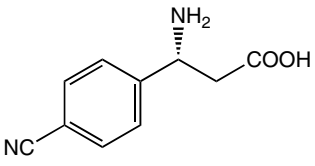
ß-Amino Acids

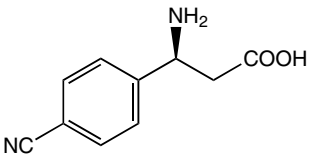
The design and synthesis of β-amino acids[1] and of other biologically active amino acid derivatives is a challenge in current drug design.[2] The only commonly naturally occurring β-amino acid is β-alanine (A16665). A number of new β-amino acid derivatives are now available through Alfa Aesar, and many have already been extensively cited in scientific literature in the following examples.

Recent studies have shown that racemic 3-amino-3-(4-cyanophenyl)propionic acid has been applied in the synthesis of aromatase inhibitors,[3] antagonists of the Bradykinin B1 receptor,[4] and TNFα inhibitors.[5] Alfa Aesar is pleased to supply enantiomerically pure 3-amino-3-(4-cyanophenyl)propionic acids in both R (H52132) and S forms (H52084).

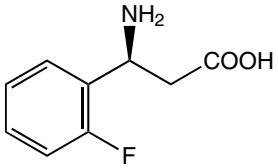
Chiral propionic acid (H52072) has been widely used in the synthesis of potentially pharmaceutically active products such as glycine transport inhibitors,[6] and as potent antimitotic agents.[7] Furthermore, it has been employed in the total synthesis of several naturally occurring compounds such as (+)-(S)-dihydroperiphylline,[8] (+)-(8S,13R)-Cyclocelabenzine,[9] (-)-dihydrocelacinnine and (+/-)-celabenzine.[10] Finally, a patent has described the use of H52166 as an AGC kinase inhibitor.[11] Alfa Aesar has extended its comprehensive range of heterocyclic compounds with the following β-amino acids.



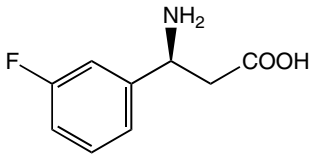
H52132
(R)-3-Amino-3-(4-cyanophenyl) propionic acid, 95%



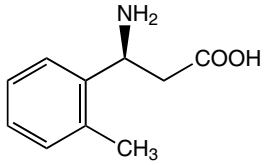
H52084
(S)-3-Amino-3-(4-cyanophenyl) propionic acid, 95%



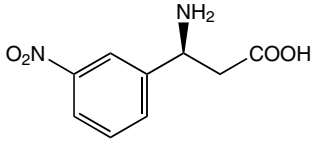
H52046
(S)-3-Amino-3-(2-fluorophenyl) propionic acid, 95%



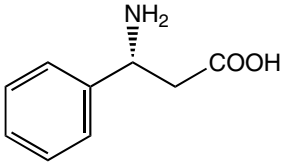
H52089
(S)-3-Amino-3-(3-fluorophenyl) propionic acid, 95%



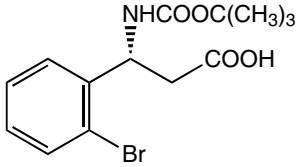
H52039
(S)-3-Amino-3-(2-methyl-phenyl)propionic acid, 95%



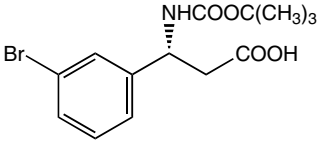
H52027
(S)-3-Amino-3-(3-nitrophenyl) propionic acid, 95%



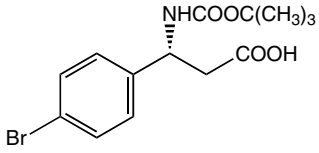
H52034
(R)-3-Amino-3-phenylpropionic acid, 95%



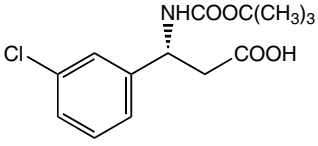
H52028
(R)-3-(Boc-amino)-3-(2-bromo-phenyl)propionic acid, 95%



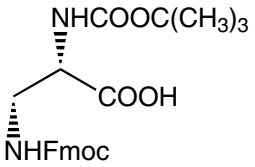
H52033
(R)-3-(Boc-amino)-3-(3-bromo-phenyl)propionic acid, 95%



H52166
(R)-3-(Boc-amino)-3-(4-bromo-phenyl)propionic acid, 95%

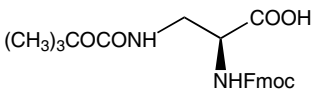


H52003
(R)-3-(Boc-amino)-3-(3-chloro-phenyl)propionic acid, 95%

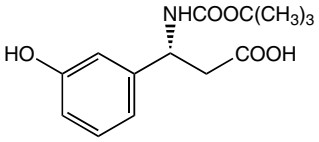


H51964
(S)-2-(Boc-amino)-3-(Fmoc-amino)propionic acid, 98%
[122235-70-5]

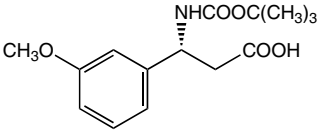
ß-Amino Acids



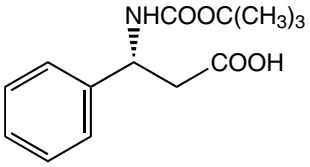
H51987
(S)-3-(Boc-amino)-2-(Fmoc-amino)propionic acid, 95%
[162558-25-0]



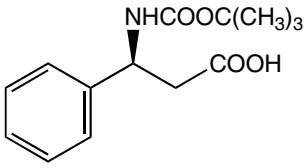
H52109
(R)-3-(Boc-amino)-3-(3-hydroxyphenyl)propionic acid, 95%



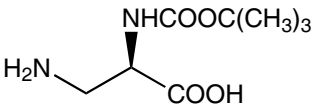
H52001
(R)-3-(Boc-amino)-3-(3-methoxyphenyl)propionic acid, 95%



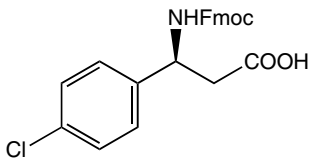
H51984
(R)-3-(Boc-amino)-3-phenyl-propionic acid, 95%
[161024-80-2]



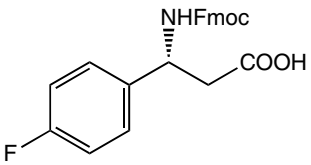
H52072
(S)-3-(Boc-amino)-3-phenyl-propionic acid, 95%
[103365-47-5]



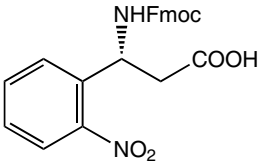
H52821
N(alpha)-Boc-D-2,3-diamino-propionic acid, 97%
[76387-70-7]



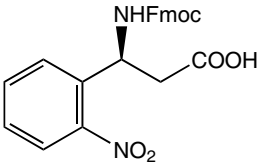
H52105
(S)-3-(4-Chlorophenyl)-3-(Fmoc-amino)propionic acid, 95%
[479064-91-0]



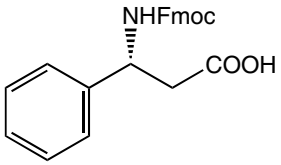
H52131
(R)-3-(4-Fluorophenyl)-3-(Fmoc-amino)propionic acid, 95%
[479064-95-4]



H52037
(R)-3-(Fmoc-amino)-3-(2-nitro-phenyl)propionic acid, 95%



H52101
(S)-3-(Fmoc-amino)-3-(2-nitro-phenyl)propionic acid, 95%



H52074
(R)-3-(Fmoc-amino)-3-phenyl-propionic acid, 95%
[220498-02-2]

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[2](a) *Enantioselective Synthesis of* β*-Amino Acids*, 2nd ed.; E. Juaristi, V. A. Soloshonok, Eds.; John Wiley & Sons: Hoboken, NJ, 2005; (b) G. Cardillo, & C. Tomasini, *Chem. Soc. Rev.* 1996, 117; (c) A. A. Fuller, B. Chen, A. R. Minter, & A. K. Mapp, *J. Am. Chem. Soc.* 2005, **127**, 5376; (c) C. Palomo, J. M. Aizpurua, I. Ganboa, & M. Oiarbide, *Synlett*, 2001, 1813.
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[11]DEVGEN N.V. Patent: WO2007/6547 A1, 2007.