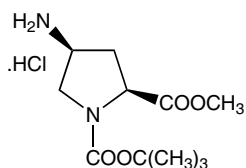


Proline & Pyrrolidine Salts

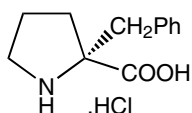
Saturated nitrogen-containing heterocycles such as prolines and pyrrolidines are often found as the core structural unit a large number of biologically active alkaloids,¹ natural products and frequently show potent and diverse biological activities.² A number of new derivatives are now available through Alfa Aesar and have already been extensively cited in the scientific literatures as in the following examples.

H52743 and H52815 were used as starting points for the synthesis and structure-activity relationships of a series of amino acid prodrugs of racemic and chiral 7-(3-amino-1-pyrrolidinyl)quinolones.³ These molecules have also been applied to the synthesis of Spiroindane based amides, as potent and selective MC4R agonists for the treatment of obesity.⁴ H52410 has been employed in the synthesis of pharmaceutically active products for the treatment of spinocerebellar ataxia.⁵ The S analogue H52729 has been used to prepare various pharmaceutical compositions for the treatment of diseases using modulators of cystic fibrosis transmembrane conductance regulator.⁶ Alfa Aesar has extended its comprehensive range of proline and pyrrolidines with the following compounds.



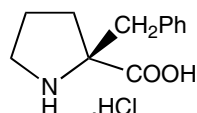
H52731

cis-4-Amino-N-Boc-L-proline methyl ester hydrochloride, 97%
[171110-72-8]



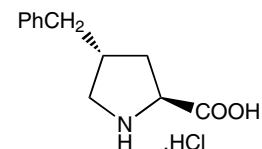
H52080

(R)-2-Benzyl-DL-proline hydrochloride, 95%
[86116-84-9]



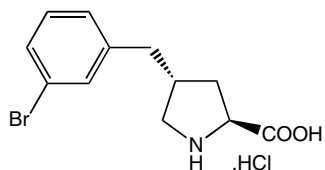
H52019

(S)-2-Benzyl-DL-proline hydrochloride, 95%
[637020-57-6]



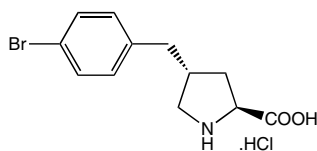
H52041

trans-4-Benzyl-L-proline hydrochloride, 95%



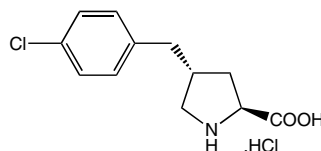
H52032

trans-4-(3-Bromobenzyl)-L-proline hydrochloride, 95%



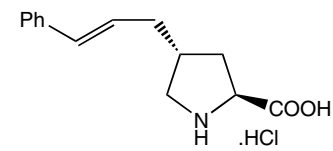
H52078

trans-4-(4-Bromobenzyl)-L-proline hydrochloride, 95%



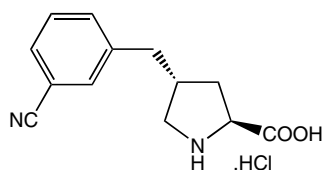
H52092

trans-4-(4-Chlorobenzyl)-L-proline hydrochloride, 95%



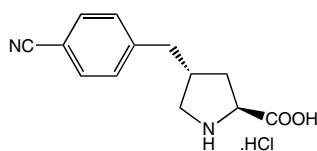
H52119

trans-4-Cinnamyl-L-proline hydrochloride, 95%



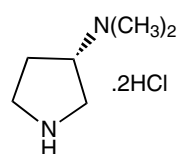
H52023

trans-4-(3-Cyanobenzyl)-L-proline hydrochloride, 95%



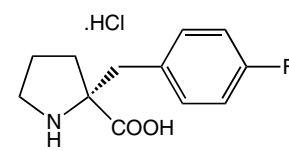
H52098

trans-4-(4-Cyanobenzyl)-L-proline hydrochloride, 95%



H30661

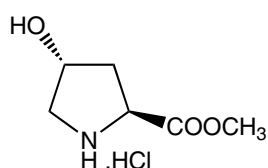
(S)-(-)-3-Dimethylaminopyrrolidine dihydrochloride, 97%
[144043-20-9]



H52102

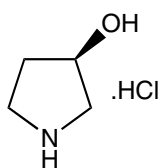
(R)-2-(4-Fluorobenzyl)-DL-proline hydrochloride, 95%
[637020-68-9]

Proline & Pyrrolidine Salts



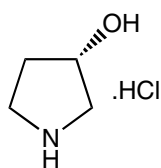
H51726

trans-4-Hydroxy-L-proline methyl ester hydrochloride, 98%
[40216-83-9]



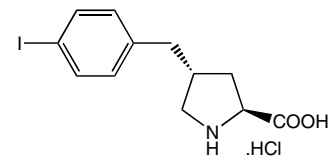
H52743

(R)-3-Hydroxypyrrolidine hydrochloride, 97%
[104706-47-0]



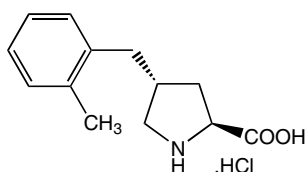
H52815

(S)-3-Hydroxypyrrolidine hydrochloride, 97%
[122536-94-1]



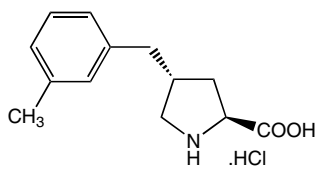
H52126

trans-4-(4-Iodobenzyl)-L-proline hydrochloride, 95%
[049744-44-6]



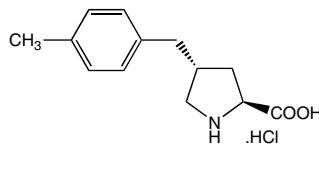
H52087

trans-4-(2-Methylbenzyl)-L-proline hydrochloride, 95%



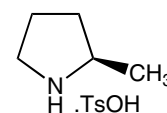
H52014

trans-4-(3-Methylbenzyl)-L-proline hydrochloride, 95%



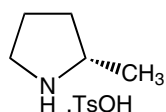
H52025

trans-4-(4-Methylbenzyl)-L-proline hydrochloride, 95%



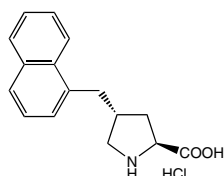
H52410

(R)-2-Methylpyrrolidine p-toluenesulfonate, 97%
[204387-55-3]



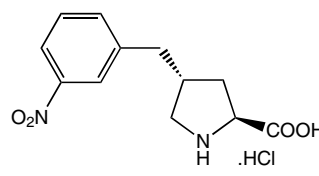
H52729

(S)-2-Methylpyrrolidine p-toluenesulfonate, 97%



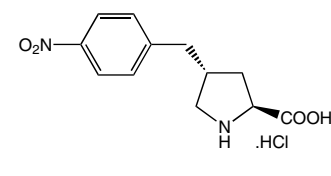
H52081

trans-4-(1-Naphthylmethyl)-L-proline hydrochloride, 95%



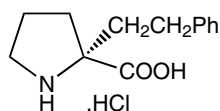
H52133

trans-4-(3-Nitrobenzyl)-L-proline hydrochloride, 95%



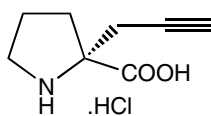
H52123

trans-4-(4-Nitrobenzyl)-L-proline hydrochloride, 95%



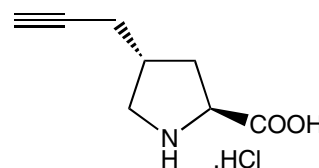
H52088

(S)-2-(2-Phenylethyl)-DL-proline hydrochloride, 95%



H52130

(R)-2-(2-Propynyl)-DL-proline hydrochloride, 95%



H52048

trans-4-(2-Propynyl)-L-proline hydrochloride, 95%

¹W. H. Pearson, *Studies in Natural Product Chemistry. Vol 1*; Atta-Ur-Rahman, Ed; Elsevier: Amsterdam, 1988; p 323-358.

²D. O'Hagen, *Nat. Prod. Rep.*, 2000, **17**, 435.

³J. P. Sanchez, J. M. Domagala, C. L. Heifetz, S. R. Priebe, J. A. Sesnie, A. K. Trehan, *J. Med. Chem.*, 1992, **35**, 1764

⁴S. He, *et al.*, *Bioorg. Med. Chem. Lett.*, 2010, **20**, 4399.

⁵Shionogi and Co., Ltd., Patent: WO2006/28277 A1, 2006.

⁶Vertex Pharmaceuticals Incorporated, Patent: US2010/168094 A1, 2010.