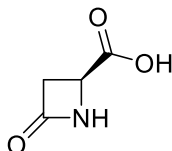


L-Pyroaspartic acid

Code No.: **BIA-P2222**

Pack sizes: **1 mg, 5 mg**



Synonyms :

Specifications

CAS #	: 16404-94-7
Molecular Formula	: C₄H₅NO₃
Molecular Weight	: 115.1
Source	: Synthetic
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

L-Pyroaspartic acid ((2S)-4-oxoazetidine-2-carboxylic acid) is a head to tail cyclisation of L-aspartic acid to form the only amino acid derived azetidine. Synthetically, L-pyroaspartic acid is prepared by cyclisation of the corresponding protected esters. Unlike L-pyroglutamic acid, L-pyroaspartic acid is not a thermal degradation product but is re-named to better reflect the compound's structural relationship to the proteogenic L-aspartic acid. Despite the intensive interest in beta-lactams spanning 70 years, L-pyroaspartic acid has received scant attention and has played more a role as a synthon to more complex molecules.

References

1. Carbon based nucleophilic ring opening of activated monocyclic β -lactams; Synthesis and stereochemical assignment of the ACE Inhibitor WF-10129. Baldwin J.E. et al. Tetrahedron 1995, 51, 11581.
2. The stereocontrolled synthesis of (2S,3R)-3-alkyl-L-aspartic acids using a 2-azetidinone framework as a chiral template. Hanessian S. et al. Synlett. 1992, 33.