

L-Pyrohomoglutamic acid

## PRODUCT DATA SHEET

Code No.: BIA-P2220

Pack sizes: 1 mg, 5 mg

Synonyms : L-Pyro-α-aminoadipic acid, (2S)-6-Oxopiperidine-2-carboxylic acid

## Specifications

CAS # : 34622-39-4 Molecular Formula :  $C_6H_9NO_3$  Molecular Weight : 143.1 Source : Synthetic Appearance : White solid Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in methanol or DMSO

## **Application Notes**

L-Pyrohomoglutamic acid (S-6-oxopiperidine-2-carboxylic acid) is a δ-lactam formed the head-to-tail cyclisation of L-homoglutamic acid. Unlike pyroglutamic acid, L-pyrohomoglutamic acid has not been reported as a pyrolysis product but is renamed to better reflect the compound's structural relationship to L-homoglutamic acid. L-Pyrohomoglutamic acid has been reported as a secondary metabolite of Nocardia lactamdurans and a co-metabolite of penicillin V from Penicillium chrysogenum but its pharmacological properties have not been extensively investigated.

## References

 Overexpression of the Nocardia lactamdurans alpha-aminoadipyl-cysteinyl-valine synthetase in Streptomyces lividans. The purified multienzyme uses cystathionine and 6-oxopiperidine 2-carboxylate as substrates for synthesis of the tripeptide. Coque J.J.R. et al. Eur J Biochem. 1996, 242, 264.

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