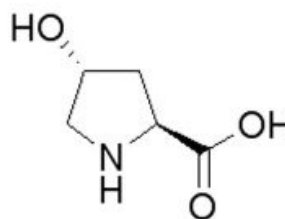
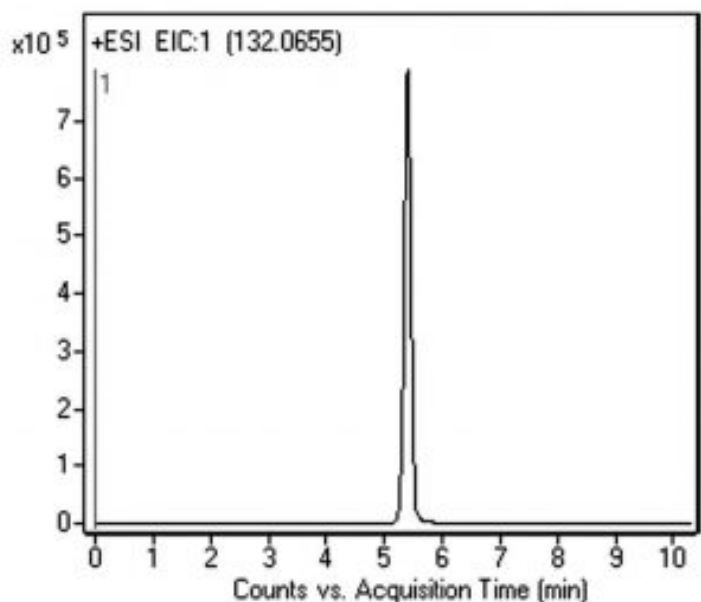


Proline: *Trans*-4-Hydroxy-L-Proline by LCMS - AppNote

Rapid, High Efficiency Method by LCMS

This method is highly specific, efficient and fast for the analysis detection, small volumes of the reaction mixture can be injected and of *trans*-4-hydroxy-L-proline. Due to the high specificity of the the amount of the produced compound can be determined. No derivatization is required for the detection of this important compound.



Peak:

Trans-4-Hydroxy-L-Proline 132.0655 m/z (M + H)⁺

Method Conditions

Column: Cogent Diamond Hydride™, 4μm, 100Å

Catalog No.: [70000-05P-2](#)

Dimensions: 2.1 x 50mm

Mobile Phase:

A: 50% Methanol / 50% DI Water / 0.05% Acetic Acid

B: 97% Acetonitrile / 3% DI Water / 0.05% Acetic Acid

Gradient:

Time (minutes)	%B
0	95
10	30
11	30
12	95

Post Time: 5 minutes

Flow rate: 0.4 mL / minute

Detection: ESI - POS - Agilent 6210 MSD TOF Mass Spectrometer

Injection vol.: 1µL

Sample Preparation:

Stock Solution: 1 mg / mL in Methanol diluent.

Working Solution: Stock aliquot was diluted using 50% Solvent A and 50% Solvent B mixture for the final concentration 0.5 mg / L. Before injection, solution was filtered using a 0.45µm Nylon Syringe Filter (MicroSolv Tech Corp.).

Note: Isomers of Hydroxyproline have been found in nature. *Trans-4-Hydroxy-L-Proline* is the major component of Collagen, Gelatin, plant wall Proteins, etc. It is a useful material for synthesis of pharmaceuticals such as Angiotensin converting enzyme inhibitors and Carbapenem antibiotics.



Attachment

No 131 Trans-4-Hydroxy-L-Proline by LCMS pdf 0.2 Mb [Download File](#)