

APPLICATION REPORT *astec*

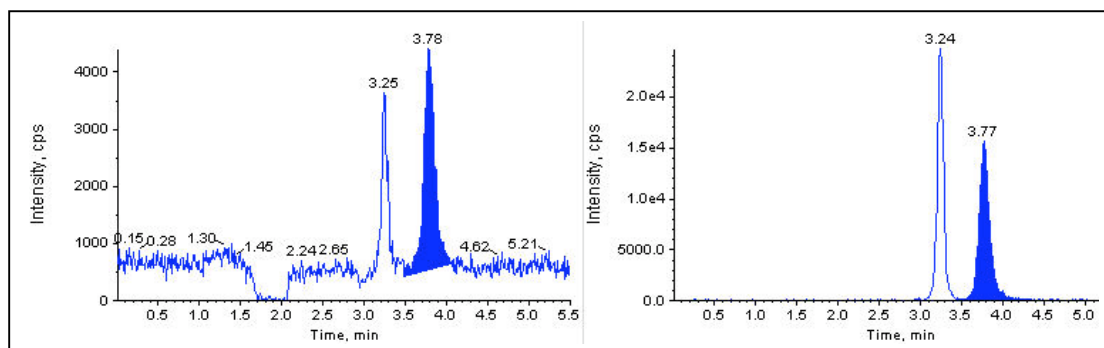
LC006 Bioanalysis

An LC-MS-MS Method For the Determination of D-Serine in Plasma Using a CHIROBIOTIC™ TAG, 250x4.6mm Column

CHIROBIOTIC TAG has been chosen as the optimum CSP for the separation of serine using an MS compatible mobile phase. Levels of detection down to 100 ng/mL were achieved (below endogenous levels) and the validated method was found to be very robust and specific.

D-serine has been identified as a possible biomarker for schizophrenia and the measurement of low levels in plasma could be critical to monitoring the success of candidate drug therapies.

Chromatogram of Representative Endogenous Plasma Sample



Conditions:

Column: CHIROBIOTIC TAG, 250x4.6mm, 5 μ M with
ODS Guard Cartridge 4.0x3.0mm
Catalog No. 14024 (CHIROBIOTIC TAG)
Mobile Phase: 20/80: EtOH/H₂O
Flow Rate: 1.0mL/min.
Detection: APCI MS-MS (PE Sciex API 4000), negative ion mode



Courtesy of Mr. C. Gregory, HFL Contract Research, Fordham, Cambridgeshire, UK

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