

Determination of progesterone in human plasma by solid phase extraction and LCMS-MS using a Thermo Scientific Accucore enhanced technology LC column and HyperSep Retain PEP 30 mg/1 mL SPE cartridge.

Application #531

04 September 2012

Copyright © 2010 Thermo Fisher Scientific Inc.

Exported by Thermo Fisher Scientific Applications Library

Determination of progesterone in human plasma by solid phase extraction and LCMS-MS using a Thermo Scientific Accucore enhanced technology LC column and HyperSep Retain PEP 30 mg/1 mL SPE cartridge.

General Information

Market: Pharmaceutical

Matrix: Human Plasma

Instrument type: UHPLC

Description

Accucore™ HPLC columns use Core Enhanced Technology™ to facilitate fast and high efficiency separations. The 2.6 μm diameter particles are not totally porous, but rather have a solid core and a porous outer layer. The optimised phase bonding creates a series of high coverage, robust phases. This coverage results in a significant reduction in secondary interactions and thus highly efficient peaks with very low tailing.

Method Details

Instrument parameters

Instrument Parameter	Value
Run Time Length	4.000 min
Mobile_Phase_A	Water + 0.1 % Formic Acid
Mobile_Phase_B	Methanol + 0.1 % Formic Acid
Flow_Rate	0.3 mL/min
Column_Temperature	Ambient
Injection_Details	Inject 10 µl using a 100 µl Syringe

Determination of progesterone in human plasma by solid phase extraction and LCMS-MS using a Thermo Scientific Accucore enhanced technology LC column and HyperSep Retain PEP 30 mg/1 mL SPE cartridge. - 3

Gradient Details

Ret. Time [min]	Flow [ml/min]	%B [%]	%C [%]	%D [%]
0.000	0.300	60.0	0.0	0.0
0.200	0.300	60.0	0.0	0.0
1.000	0.300	95.0	0.0	0.0
2.500	0.300	95.0	0.0	0.0
2.800	0.300	60.0	0.0	0.0
4.000	0.300	60.0	0.0	0.0

Determination of progesterone in human plasma by solid phase extraction and LCMS-MS using a Thermo Scientific Accucore enhanced technology LC column and HyperSep Retain PEP 30 mg/1 mL SPE cartridge. - 4

Column Details

column_A	
Manufacturer	Thermo Fisher Scientific
Model	Accucore Phenyl- Hexyl
Diameter	2.1
Length	50
Particle Size	2.6
Packing Material	Phenyl-Hexyl

Determination of progesterone in human plasma by solid phase extraction and LCMS-MS using a Thermo Scientific Accucore enhanced technology LC column and HyperSep Retain PEP 30 mg/1 mL SPE cartridge. - 5

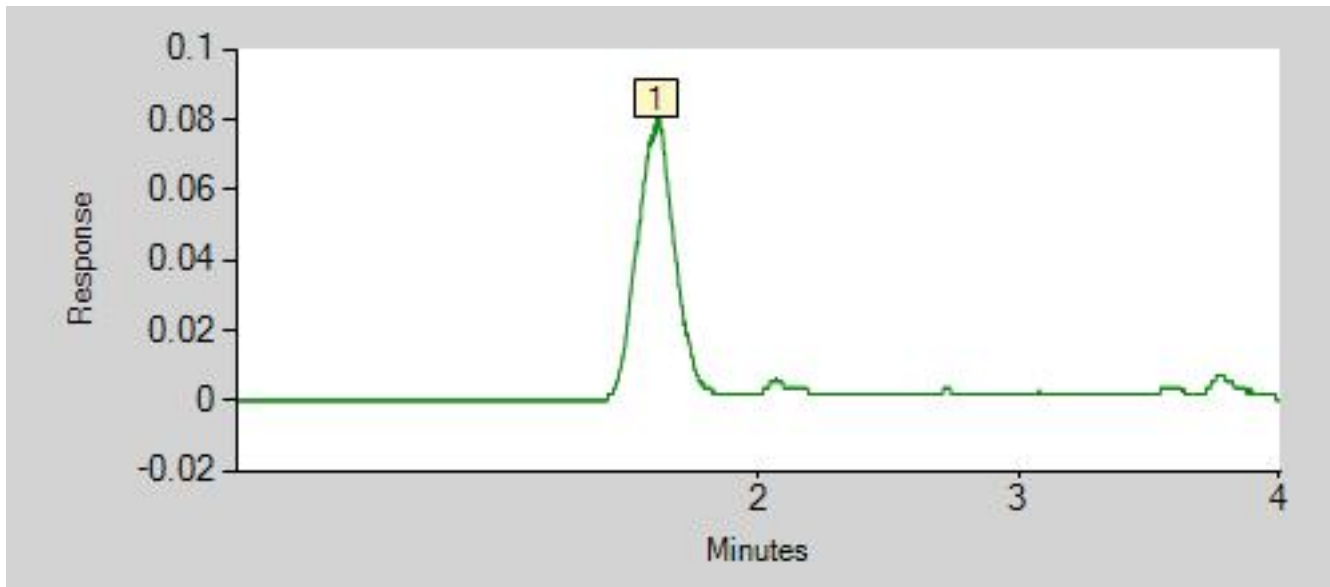
System information

Instrument Type	UHPLC
UHPLC	Generic

Determination of progesterone in human plasma by solid phase extraction and LCMS-MS using a Thermo Scientific Accucore enhanced technology LC column and HyperSep Retain PEP 30 mg/1 mL SPE cartridge. - 6

Results

Channel Channel_A



No	Peak_Name	*Compound _Class	Retention_Ti me	Peak_Area	Peak_Area_p c	Peak_Height	Peak_Height _pc	Plates_(USP)	Resolution_(USP)	Tailing_Facto r_(USP)
1	Progesterone	Hormone	1.611	0.013	100.00	0.084	100.00	382	n.a.	1.03

Determination of progesterone in human plasma by solid phase extraction and LCMS-MS using a Thermo Scientific Accucore enhanced technology LC column and HyperSep Retain PEP 30 mg/1 mL SPE cartridge. - 7

Appendix

The application can be accessed at <http://dlibrary.dionex.com/Public/View.aspx?ApplicationID=531>

Available Downloads

No downloads available.

Related Information

No related information available.