

HPLC Application

ID No.: 20685

Biogenic Amines by LCMS using Kinetex 1.7u C18 50x3.0mm

Column: Kinetex[®] 1.7 μ m C18 100 \AA , LC Column 50 x 3 mm, Ea

Dimensions: 50 x 3 mm ID

Order No: 00B-4475-Y0

Elution Type: Gradient

Eluent A: 30mM Ammonium formate

Eluent B: Acetonitrile

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	80	20
	2	3	40	60
	3	3.1	0	100
	4	4	0	100
	5	4.1	80	20
	6	5	80	20

Flow Rate: 600 μ L/min

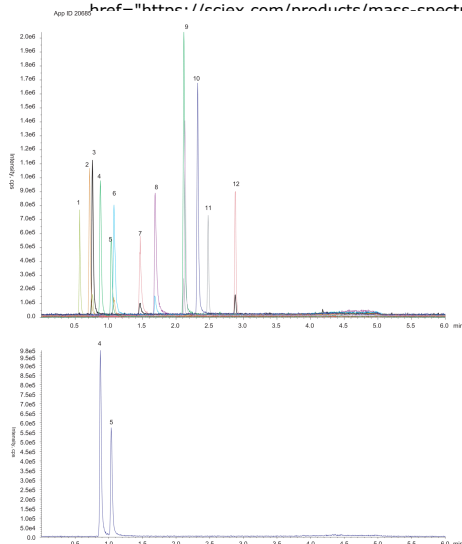
Col. Temp.: ambient

Detection: Tandem Mass Spec (MS-MS) @ (ambient)

Detector Info: SCIEX



Products used in this application:



Biogenic Amines by LCMS using Kinetex 1.7u C18 50x3.0mm

ANALYTES:

- 1 IQx
- 2 8-MeIQx
- 3 IQ
- 4 7,8-DiMeIQx
- 5 4,8-DiMeI-Qx
- 6 MeIQ
- 7 Trp-P-2
- 8 Harman
- 9 PhIP
- 10 Norharman
- 11 AaC
- 12 MeAaC



Sample Preparation Details

for HPLC Application ID No.: 20685

Biogenic Amines by LCMS using Kinetex 1.7u C18 50x3.0mm

PRODUCT DESCRIPTION:

Strata[™]-X-C 33 µm Polymeric Strong Cation, 60 mg / 3 mL, Tubes , 50/Pk

Order No.: 8B-S029-UBJ

SOLID PHASE EXTRACTION (SPE) PROCEDURE:

Note: The solvent volumes shown below are for a 60 mg bed mass.

The solvent volumes will need to be adjusted for a smaller or larger bed mass.

Condition:

Load:

Salmon samples were pre-treated prior to loading onto the conditioned Strata-X-C sorbent:

1. weigh out 4.0 g of salmon into a 50 mL plastic centrifuge tube
2. pulverize meat using a spatula against the sides of the centrifuge tube
3. add 20 mL Acetonitrile and 12 mL of Hexane, vortex for 1 minute
4. centrifuge for 5 minutes at 14,500 rpm
5. transfer the bottom Acetonitrile layer to a new tube
6. repeat extraction with a new 20 mL aliquot of Acetonitrile, vortex for 1 minute then centrifuge
7. collect the lower layer and combine fractions

The combined fractions are now ready to loaded onto the conditioned Strata-X-C sorbent.

Wash:

Dry:

Elute:

Final Prep and Analysis:

Inject: 2 µL on HPLC Tandem Mass Spec (MS-MS) @ (ambient)

ANALYTES:	Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1 IQx	0				
2 8-MeIQx	0				
3 IQ	0				
4 7,8-DiMeIQx	0				
5 4,8-DiMeI-Qx	0				
6 MeIQ	0				
7 Trp-P-2	0				
8 Harman	0				
9 PhIP	0				
10 Norharman	0				
11 AaC	0				
12 MeAaC	0				

Note: This method is designed as a convenient starting point for further investigation and can be tailored to meet your extraction goals. Call your local Phenomenex Representative for assistance in method development and optimization techniques.

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For more information contact your Phenomenex Representative at support@phenomenex.com



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