



SELECTRA® C18 HPLC COLUMN



INNOVATION THROUGH CHEMISTRY

SELECTRA® C18 HPLC COLUMNS



Product Benefits

- Good choice for easily converting current C18 methods
- Suitable for most traditional reverse phase analyses
- High purity, type B spherical silica
- Excellent Carbon loading
- Fully endcapped
- Conforms to USP L1

UCT has leveraged its experience working with analytical scientists to create a line of HPLC columns.

Selectra® columns start with the bare silica support. UCT uses only an ultra-pure and highly reproducible material. It is a type B, spherical silica with a 100Å pore size. Currently, 3 µm and 5 µm particle sizes are available. As a vertically integrated company, UCT is the only column manufacturer that makes its own highly reproducible and high purity silanes. These silanes are bonded to the silica support to create stationary phases of unmatched quality.

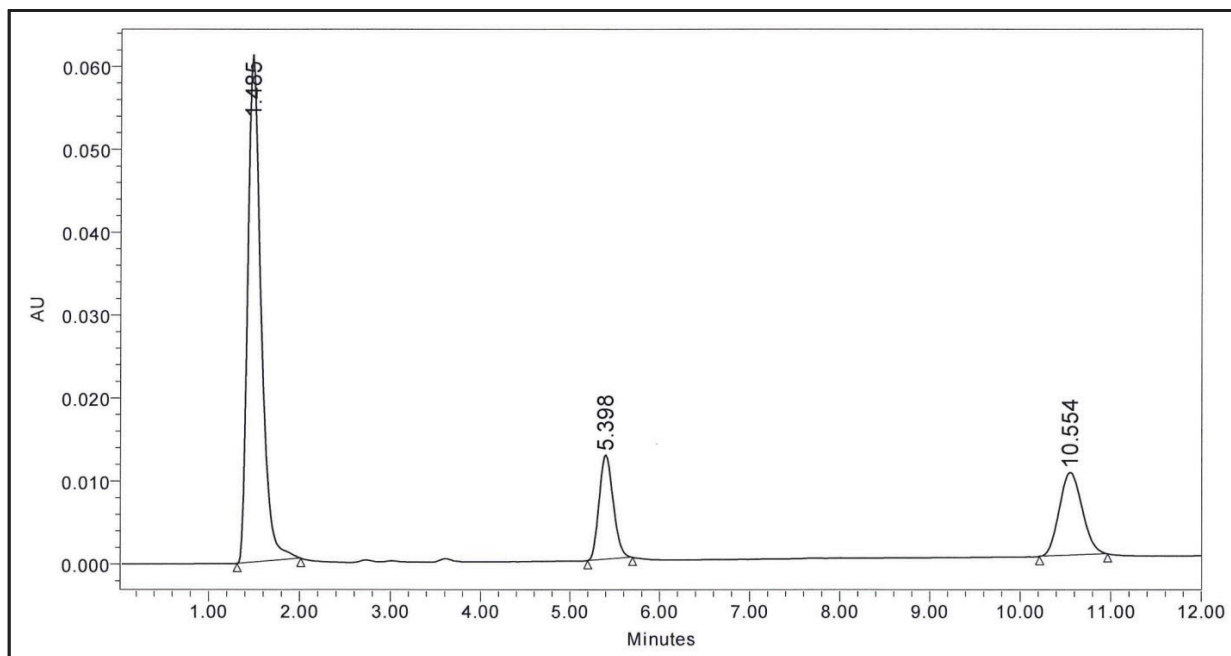
All Selectra® HPLC columns are individually packed and every column is QC tested. Each column must meet high standards for theoretical plate count and peak symmetry under Statistical Process Control. There is no batch column testing, and every column shipped comes with a CoA containing a chromatogram of the test mix run on that column along with its results.

The Selectra® C18 is our workhorse C18 phase and is a great choice for converting from another C18 column. It can be used for the separation of acidic, neutral and basic compounds.

Selectra® C18 HPLC Columns		
Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLC-1850ID21-18UM
100 x 2.1 mm	1.8 µm	SLC-18100ID21-18UM
50 x 4.6 mm	1.8 µm	SLC-1850ID46-18UM
100 x 4.6 mm	1.8 µm	SLC-18100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLC-18GDC20-18UMOPT
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLC-18GDC46-18UMOPT
50 x 2.1 mm	3 µm	SLC-1850ID21-3UM
100 x 2.1 mm	3 µm	SLC-18100ID21-3UM
50 x 4.6 mm	3 µm	SLC-1850ID46-3UM
100 x 4.6 mm	3 µm	SLC-18100ID46-3UM
150 x 4.6 mm	3 µm	SLC-18150ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLC-18GDC20-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLC-18GDC46-3UM
50 x 2.1 mm	5 µm	SLC-1850ID21-5UM
100 x 2.1 mm	5 µm	SLC-18100ID21-5UM
50 x 4.6 mm	5 µm	SLC-1850ID46-5UM
100 x 4.6 mm	5 µm	SLC-18100ID46-5UM
150 x 4.6 mm	5 µm	SLC-18150ID46-5UM
250 x 4.6 mm	5 µm	SLC-18250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLC-18GDC20-5UM

HPLC Guard Holder	
HPLC Guard Cartridge Holder	SLGRDHLDLDR
UHPLC Direct Connect Guard Cartridge Holder	SLGRDHLDLDR-HPOPT
Replacement Peek Tip for Holder	SLGRDHLDLDR-TIP (2/pk)

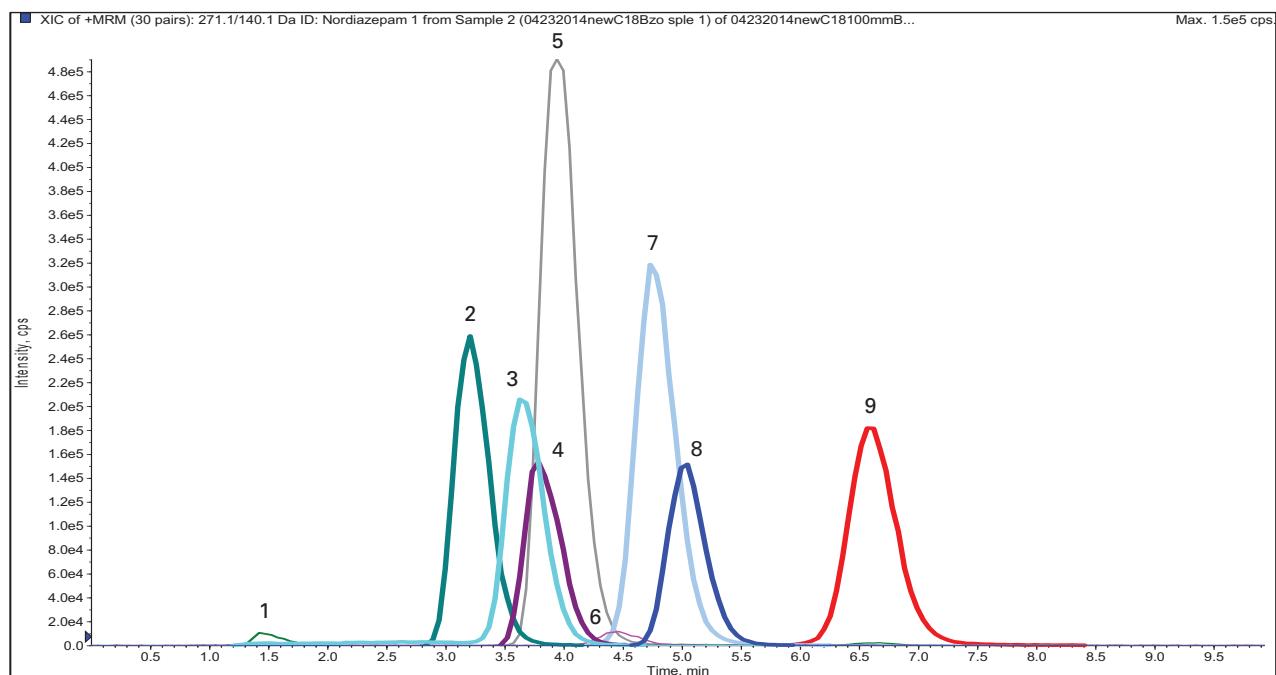
Reverse Phase Test Mix



HPLC Conditions	
Column	Selectra® C18 - 50 x 2.1 mm, 3 µm Particle
Part Number	SLC-18100ID21-3UM
Column Temperature	Ambient
Mobile Phase	H ₂ O: ACN (40:60)
Flow Rate	0.2 mL/min
Run Time	6 min
Detector	UV@254 nm

Analyte	RT (min)
Uracil	1.485
Toluene	5.398
Propylbenzene	10.554

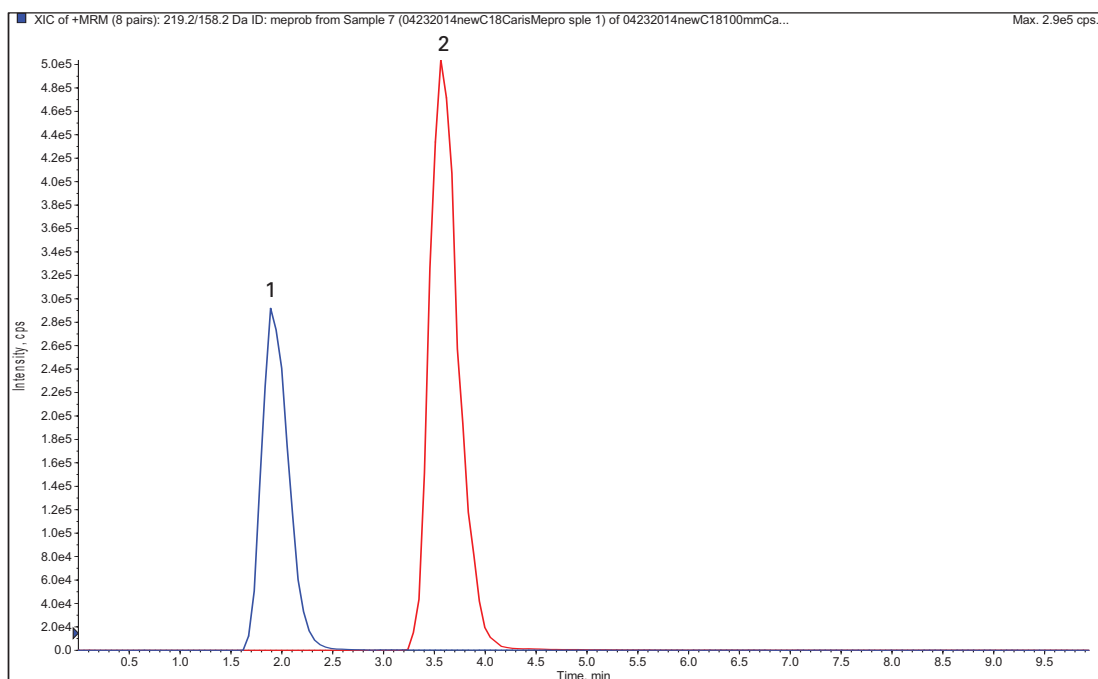
Benzodiazapene Mix



HPLC Conditions	
Column	Selectra® C18, 100 x 2.1 mm, 3 µm
Part Number	SLC-18100ID21-3UM
Column Temperature	50 °C
Mobile Phase	Isocratic; 40:60 H ₂ O w/ 0.1% Formic Acid: MeOH w/ 0.1% Formic Acid
Flow Rate	0.3 mL/min
Injection Volume	5 µL

Mass Spec Table				
Analyte	RT/ minutes	Precursor Ion	Product Ion 1	Product Ion 2
7-aminoclonazepam	1.44	286.09	222.3	250.2
Clonazepam	3.20	316.13	270.2	241.2
Alpha-hydroxyalprazolam	3.64	325.18	297.1	216.3
Lorazepam	3.78	321.06	275.0	303.3
Oxazepam	3.94	287.09	241.3	104.1
Alprazolam	4.45	309.16	281.2	205.3
Temazepam	4.75	301.12	255.2	177.2
Nordiazepam	5.02	271.09	140.1	165.2
Diazepam	6.59	285.11	193.1	154.1

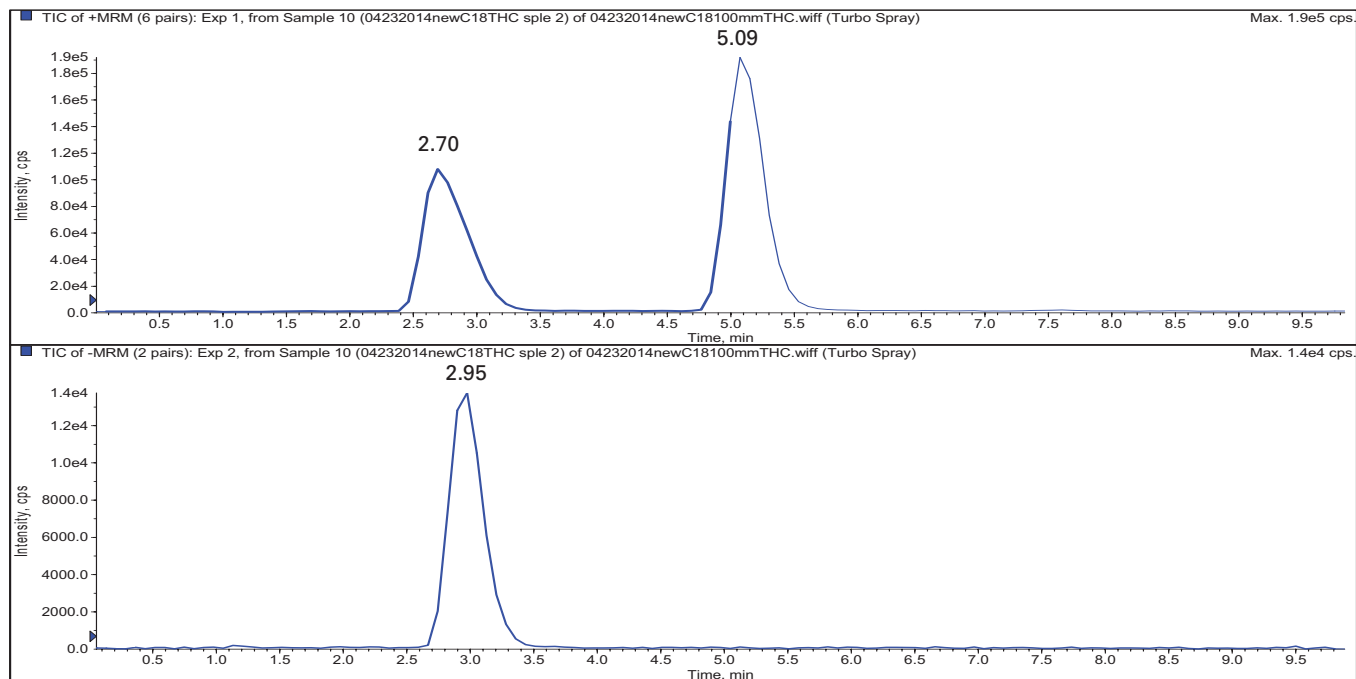
Carisoprodol and Meprobamate



HPLC Conditions	
Column	Selectra® C18, 100 x 2.1 mm, 3 µm
Part Number	SLC-18100ID21-3UM
Column Temperature	50 °C
Mobile Phase	Isocratic; 50:50 H ₂ O w/ 0.1% Formic Acid: MeOH w/ 0.1% Formic Acid
Flow Rate	0.3 mL/min
Injection Volume	5 µL

Mass Spec Table			
Analyte	RT/ minutes	Precursor Ion	Product Ion 1
Meprobamate	1.91	219.1	158.2
Carisoprodol	3.55	261.2	176.1

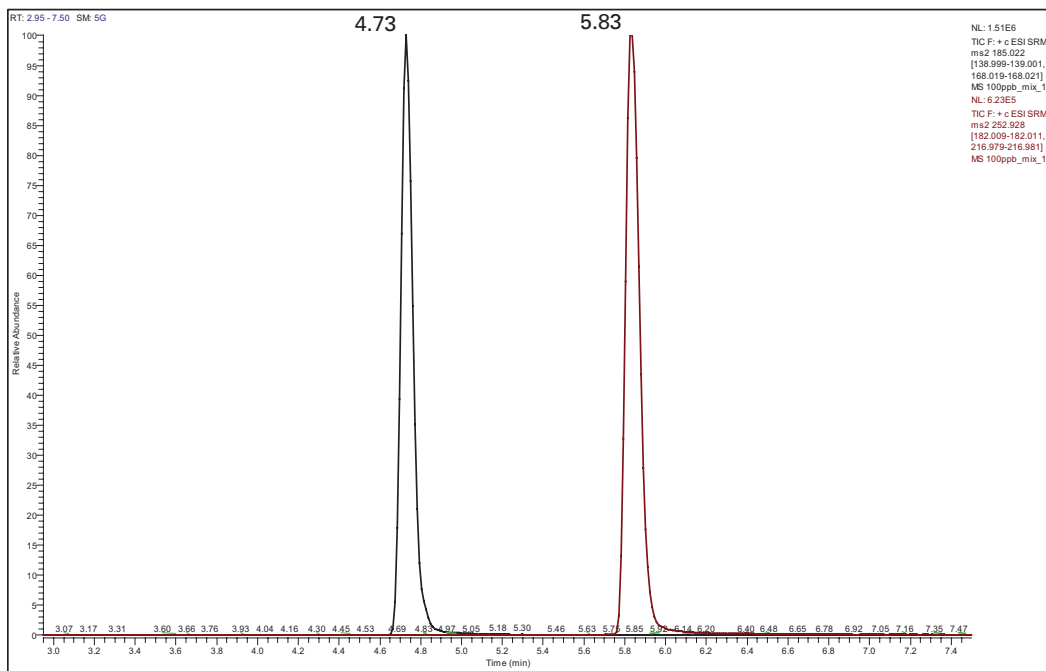
THC, THC-COOH, THCA



HPLC Conditions	
Column	Selectra® C18 - 100 x 2.1 mm, 3 µm
Part Number	SLC-18100ID21-3UM
Column Temperature	50 °C
Mobile Phase	Isocratic; 15: 85 H ₂ O w/0.1% formic acid: MeOH w/0.1% formic acid
Flow Rate	0.3 mL/min
Injection Volume	5 µL

Mass Spec Table (ESI+)				
Analyte	RT/ minutes	Precursor Ion	Product Ion 1	Product Ion 2
THC-OH	2.70	331.4	193.1	201.1
THCA	2.95	343.1	299.1	245.1
THC	5.09	315.2	193.2	123.1

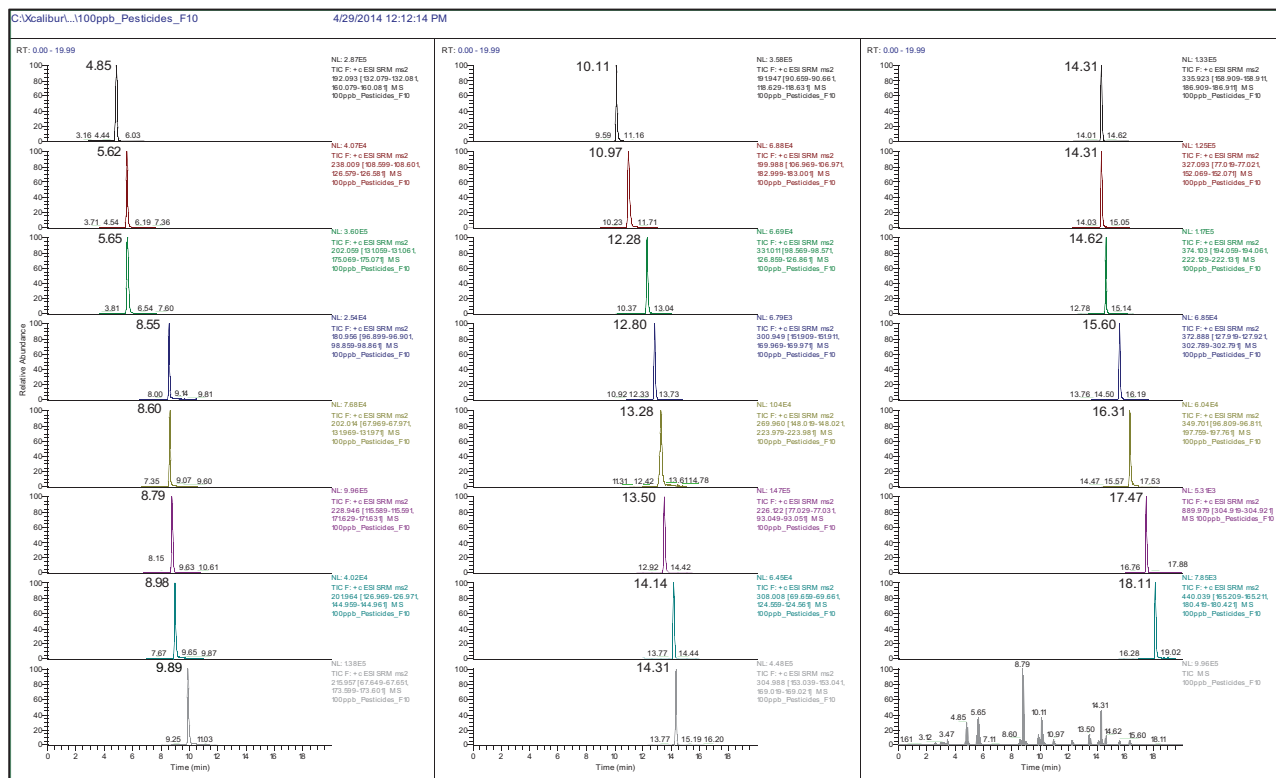
Benzidines



HPLC Conditions		
Column	Selectra® C18 100 x 2.1 mm, 3 µm	
Part Number	SLC-181001D21-3UM	
Guard Column	Selectra® C18, 10 x 2.0 mm, 3 µm	
Part Number	SLC-18GDC20-3UM	
Column Temperature	40 °C	
Mobile Phase	A: 0.1% ammonia in H ₂ O; B: MeOH	
Gradient	0 min	10% B
	1 min	10% B
	3 min	90% B
	6 min	90% B
	6.1 min	10% B
	8 min	10% B
Flow Rate	0.3 mL.min	
Sample	100 ng/mL in 50:50 H ₂ O:MeOH	
Injection Volume	10 µL	

Mass Spec Table (ESI+)				
Analyte	RT/ minutes	Precursor Ion	Product Ion 1	Product Ion 2
Benzidine	4.73	185	168	139
3,3'-dichlorobenzidine	5.83	253	217	182

23 Pesticides on SELECTRA® C18



HPLC Conditions		
Column	Selectra® C18 100 x 2.1 mm, 3 µm	
Part Number	SLC-181001D21-3UM	
Guard Column	Selectra® C18, 10 x 2.0 mm, 3 µm	
Part Number	SLC-18GDC20-3UM	
Column Temperature	40 °C	
Mobile Phase	A: 0.3% formic acid and 0.1% ammonium formate B: 0.1% formic acid in MeOH	
Gradient	Time	%B
	0 min	5%
	1 min	30%
	4 min	30%
	5 min	60%
	8 min	60%
	16 min	100%
	20 min	100%
	25 min	5%
Flow Rate	0.3 mL/min	
Sample	100 ng/mL in 50:50 H ₂ O:MeOH	
Injection Volume	5 µL	

Mass Spec Table (ESI +)				
Analyte	RT/ minutes	Precursor Ion	Product Ion 1	Product Ion 2
Carbendazim	4.85	192	132	160
Dicrotophos	5.62	238	127	109
Thiabendazole	5.65	202	175	131
DIMP	8.55	181	99	97
Simazine	8.60	202	68	132
Tebuthiuron	8.79	229	172	116
Carbaryl	8.98	202	145	127
Atrazine	9.89	216	174	68
DEET	10.11	192	119	91
Pyrimethanil	10.97	200	107	183
Malathion	12.28	331	127	99
Bifenazate	12.80	301	170	152
Acetochlor	13.28	270	224	148
Cyprodinil	13.50	226	93	77
Tebuconazole	14.14	308	710	126
Diazinon	14.31	305	169	153
Zoxamide	14.31	336	159	187
TPP (IS)	14.31	327	152	77
Pyrazophos	14.62	374	222	194
Profenofos	15.60	373	303	128
Chlorpyrifos	16.31	350	198	97
Abamectin	17.47	890	305	307
Bifenthrin	18.11	440	180	165

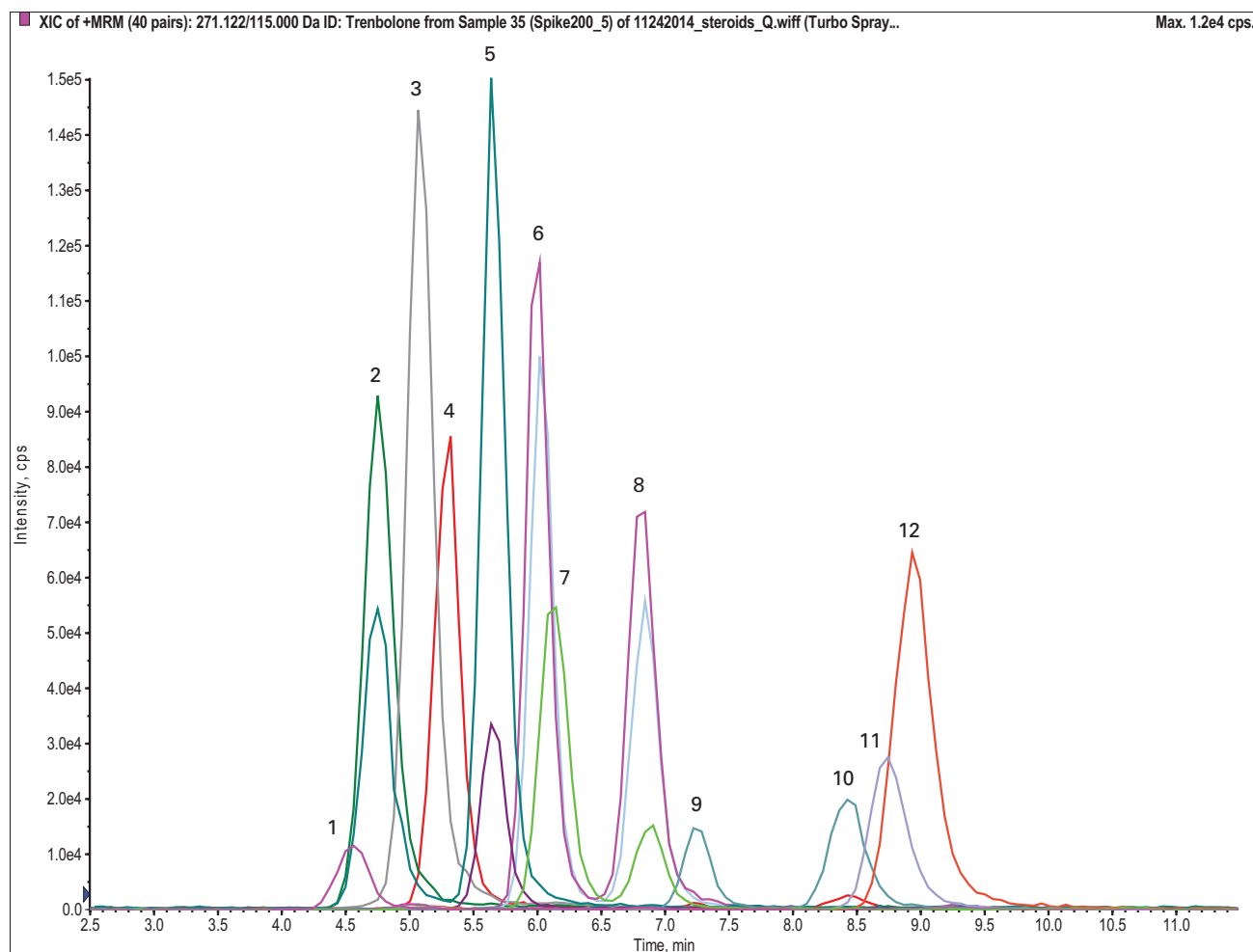
Anabolic Steroids in Whole Blood

System: AB Sciex API 4000 QTrap MS/MS with Agilent 1200 Binary Pump SL**Column:** UCT Selectra® C18 LC column, 100 x 2.1 mm, 3 µm**Guard Column:** UCT Selectra® C18 guard column, 10 x 2.0 mm, 3 µm**Column Temperature:** 50 °C**Column Flow Rate:** 0.300 mL/min**Injection Volume:** 10 µL**Gradient:**

Time	%A	%B
0	50	50
2	40	60
9	40	60
12	0	100
15	0	100
15.1	50	50
19	50	50

MRM transitions (ESI positive, dwell time: 50 ms)					
Compound		Rt (min)	Q1 ion	Q3 ion	Linearity (R ²)
1.	Trenbolone	4.56	271.1	115.0	0.9995
2.	Boldenone	4.79	287.1	120.9	0.9999
3.	Androstanedione	5.10	287.1	96.9	0.9992
4.	Nandrolone	5.33	275.1	109.2	0.9999
5.	Methandienone	5.69	301.1	120.9	0.9999
6.	Testosterone	6.04	289.1	97.0	0.9999
7.	17-hydroxyprogesterone	6.17	331.2	97.2	0.9998
8.	Epitestosterone	6.85	289.1	97.0	0.9997
9.	Methenolone	7.30	303.2	83.0	0.9994
10.	Norethandrolone	8.49	303.2	79.0	0.9990
11.	Stanozolol	8.78	329.2	81.1	0.9998
12.	Progesterone	8.99	315.2	97.0	0.9995
13.	Testosterone-D3	6.03	292.1	96.9	NA
14.	17-hydroxyprogesterone-D8	6.05	339.3	100.0	NA
15.	Stanozol-D3	8.69	332.3	81.0	NA
16.	Progesterone-D9	8.84	324.2	100.1	NA

Chromatogram of Human Whole Blood Spiked with 200 ng/mL Steroids



Peak list: 1. Trenbolone; 2. Boldenone; 3. Androstenedione; 4. Nandrolone; 5. Methandienone; 6. Testosterone;
7. 17-hydroxyprogesterone; 8. Epitestosterone; 9. Methenolone; 10. Norethandrolone; 11. Stanozolol;
12. Progesterone

PRICES AND TERMS

Our prices are subject to change without notice. The price in effect when we receive your order will apply. All prices are in US Dollars and are F.O.B. Terms of payment are net 30 days.

MINIMUM ORDERS

We welcome all orders, therefore, we do not have a minimum order requirement. When ordering, please include your purchase order number, complete "Ship To" and "Bill To" address, catalog number, quantity, and description of product(s). Also include your name and a phone number where you can be reached should we have any questions concerning your order.

SHIPMENTS

Normal processing is within 24 hours after receipt of an order. Unless special shipping requests have been made, our trained staff will send all orders by UPS Ground service. The appropriate shipping charges (freight & insurance costs) will be added to the invoice, unless otherwise instructed by the customer.

SPECIAL PRICING

We offer special pricing for volume purchases and standing orders. These discounts apply to bonded phase extraction column purchases only. Please call a sales representative for more information on special pricing qualifications.

RETURN POLICY

Our Quality Manager will handle all returns. Before returning merchandise, please call to obtain a return authorization number from the quality manager. We will need to know the reason for the return, date of purchase, purchase order number and invoice number in order to issue a return authorization number. Return merchandise must be received before a credit can be issued. Returns will not be accepted after 90 days. A restocking fee of 25% of the price paid, or a minimum of \$25.00 (whichever is greater) will be charged on all returns.

WARRANTY

All products manufactured by UCT are guaranteed against defects in materials and workmanship for a period of 90 days after shipment. UCT will replace any items that prove to be defective during this time period. The exclusive remedy requires the end user to first advise UCT of the defective product by phone or in writing and must include order number, the lot number and the shipping date.

To initiate this action, photographs of the product, including packaging and labeling of the containers, must be submitted to the UCT Representative for approval. With approval a return authorization can be initiated, and must be received within 30 days. Once the materials arrive at UCT a further inspection of the materials must be completed and accepted by our Quality Manager prior to further action of credits or replacement. UCT's total liability is limited to the replacement cost of UCT products.

This warranty does not apply to damage resulting from misuse.

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