

REVIEWED

By Anne Nord at 4:56 pm, Nov 15, 2019

11/13/2019

TS CS

Worklist: 3827

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>
M2019-4695	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ
M2019-4750	3	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ
M2019-4870	2	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ
P2019-3410	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ



AM# 28: Multi-Drug Quantitation in Blood by LC-MS/MS

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Extraction Date: 11/13/19
Plate lot#: Item #:IDP-112 Lot:190730

Analyst: Tamara Salazar
Plate Expiration: 01/30/20

Mobile phase A: 5mM Amm Form + 0.01% FA
0.5M Ammonium Hydroxide

Mobile phase B: 0.01% Formic Acid in MeOH
Ethyl Acetate 20% Methanol in Water

Blank Blood Lot: 445283-3

Column: Agilent 120 EC-C18 (2.1x 100-2.7um)

LCMS-QQQ ID: 069901

Pre-Analytic:

- 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
- 3. Create worklist.

Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Pipette **250µL blood (calibrated pipette) Pipette ID: 3** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 067105*
- 4. Pipette **250µL 0.5M ammonium hydroxide** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **300µL of blood+base** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).
(Load at 85-100 PSI- Selector to the right) Manifold ID: 067104
- 8. Wait 5 minutes.
- 9. Add **900uL ethyl acetate.**
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 12. Add **900uL ethyl acetate.**
- 13. Wait 5 minutes.
- 14. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
SPE Dry ID: 067103
- 16. Reconstitute in **100µL 20% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Create batch and process data.
Worklist path: *D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS*
Batch Name: *MDQ P2 wklt 3827 TS_evaluated compounds*
- 2. Make necessary changes to integration limits
- 3. Integration linear and R² values ≥0.98 for each analyte.
- 4. For unknown samples and controls: response ratio within 20% of average of controls and standards, RT within +/- 5% (tramadol RT +/-2%), S/N for primary transition >10 and secondary transitions >5.
- 5. Did all QCs pass for each analyte? Y / N _____ Add Control data to QC tracking spreadsheet.
- 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS: *Compounds evaluated: 7 aminoflunitrazepam, Etizolam, Flunitrazepam, Flurazepam, Midazolam, Tapentadol*

Curves limited: Flurazepam 5-250

Urine controls were included, as a urine case sample from a different worklist was added to the extraction plate.



Idaho State Police Forensic Services

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AM #28 Blood and Urine Multi-Drug Confirmatory Analysis by LCMS-QQQ---Panel 2

Methanol External Control Solution (Lot: 020419)

100 ul each 1 mg/mL stock solution in 9600 ul MeOH

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	184782	
Midazolam	Cerilliant	FE01161704	04/30/2022
Etizolam	Cerilliant	FN06061606	11/30/2020
7-Aminoflunitrazepam	Cerilliant	FN01271505	02/28/2020
Flurazepam	Cerilliant	FE02101501	04/30/2020
Prepared:	02/04/19		
Prepared By:	Tamara Salazar		
Expires:	02/04/2020		

Urine External Control Solution (Lot: WS111319)

100 ul of methanol external control solution was added to 9900 ul of blood.

Approximately 50ng/mL of each compound.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Urine	Pocatello Lab	POC031319
Methanol External Control Solution	-	020419
Prepared:	11/13/19	
Prepared by:	Celena Shrum	
Expires:	02/04/2020	

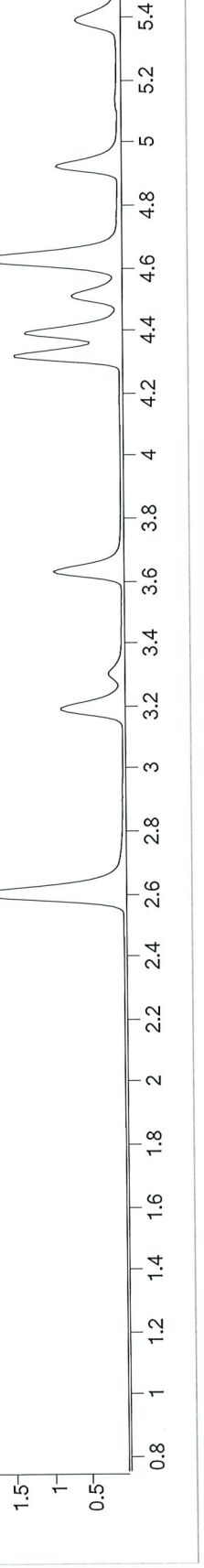


AM #28 Multi-Drug Quant. Results

Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827 TS_evaluated compounds.batch.bin
11/14/2019 9:43:45 AM

Instrument Type	Falco	Data File	p2 Negative.d
Acq. Method	MDQ P2 Combined 092319.m	Sample Operator	p2 Negative
Sample Position	P1-D6	Comment	
Injection Volume	2		
Acq. Date-Time	11/13/2019 5:29:04 PM		



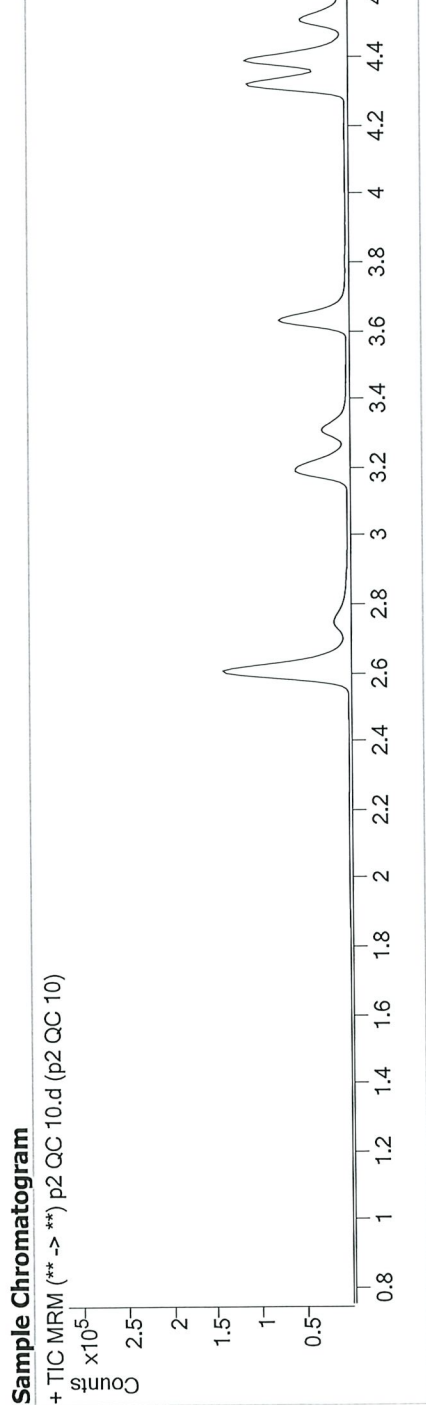
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AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827 TS_evaluated compounds.batch.bin
Calibration Last Update 11/14/2019 9:43:45 AM

Instrument	Falco	Data File	p2 QC 10.d
Type	QC	Sample	p2 QC 10
Acq. Method	MDQ P2 Combined 092319.m	Operator	
Sample Position	P1-H6	Comment	
Injection Volume	2		
Acq. Date-Time	11/13/2019 3:43:56 PM		
Sample Info.			



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	27700	806.89	25.9	170.90	163796	10.5363 ng/ml
Etizolam	5.822	16913	366.41	27.1	∞	106021	8.9810 ng/ml
Flunitrazepam	5.652	11188	1060.93	40.6	7255.54	21802	10.9657 ng/ml
Flurazepam	5.344	25592	88131.19	13.1	6529.51	21802	7.4198 ng/ml
Midazolam	5.754	6550	427.41	88.4	∞	66747	10.5214 ng/ml
Tapentadol	4.396	71453	3769.16	24.0	1758.93	207659	10.2433 ng/ml

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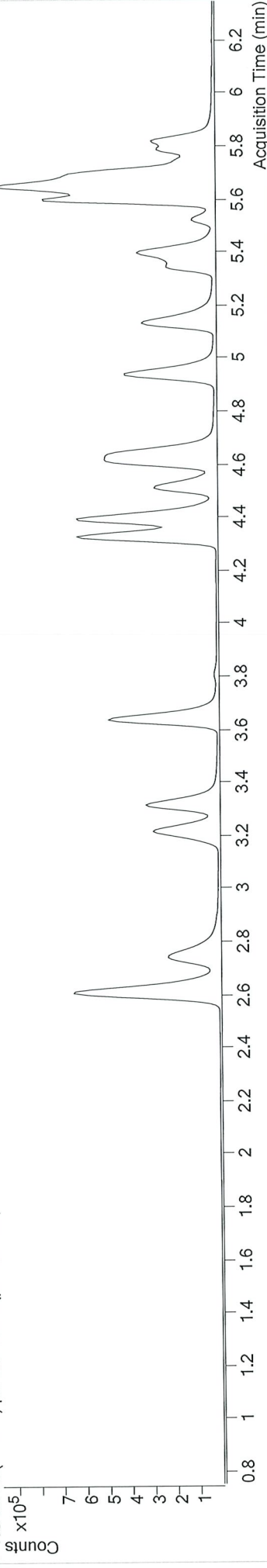
AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827 TS_evaluated compounds.batch.bin 11/14/2019 9:43:45 AM

Instrument	Falco	Data File	p2 QC 100.d
Type	QC	Sample	p2 QC 100
Acq. Method	MDQ P2 Combined 092319.m	Operator	
Sample Position	P1-G6	Comment	
Injection Volume	2		
Acq. Date-Time	11/13/2019 4:04:58 PM		

Sample Chromatogram

+ TIC MIRM (** -> **) p2 QC 100.d (p2 QC 100)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	402035	2977.49	25.5	3115.48	250046	105.3548 ng/ml
Etizolam	5.822	190851	∞	26.2	734.41	101112	116.6129 ng/ml
Flunitrazepam	5.652	101381	2207.76	42.2	∞	21052	103.1394 ng/ml
Flurazepam	5.344	480824	60131.61	13.1	311.57	21052	111.0142 ng/ml
Midazolam	5.754	88215	445.89	88.4	2809.04	96387	98.6841 ng/ml
Tapentadol	4.403	1067984	40934.60	23.7	34535.33	314122	97.8599 ng/ml

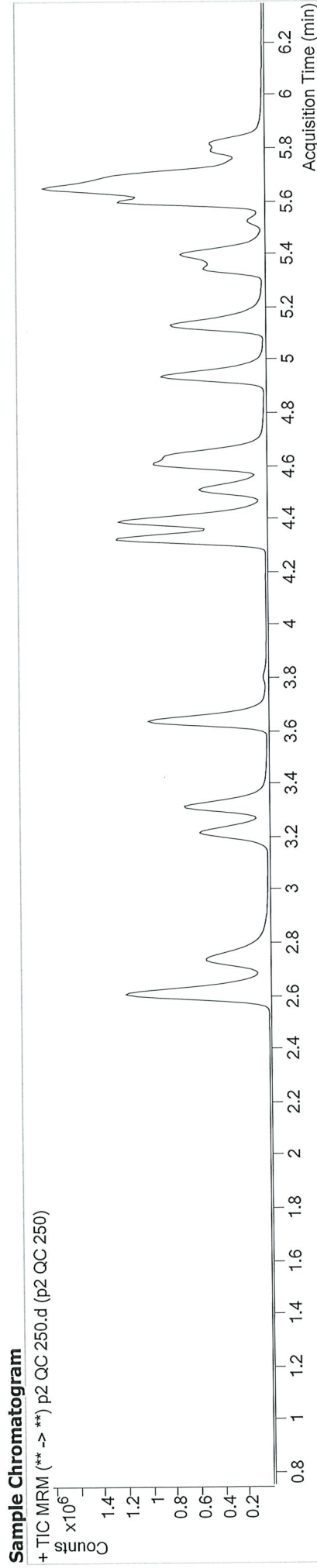
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AM #28 Multi-Drug Quant. Results

Batch results
 Calibration Last Update
 D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin
 11/14/2019 9:43:45 AM

Instrument: Falco
 Type: QC
 Acq. Method: MDQ P2 Combined 092319.m
 Sample Position: P1-F6
 Injection Volume: 2
 Acq. Date-Time: 11/13/2019 4:25:58 PM
 Sample Info:
 Data File: p2 QC 250.d
 Sample: p2 QC 250
 Operator:
 Comment:



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	918235	22566.25	25.2	9155.48	241094	250.3959 ng/ml
Etizolam	5.822	394102	1856.13	26.7	6907.08	82893	295.1798 ng/ml
Flunitrazepam	5.646	188965	3398.74	40.4	815.01	17274	234.3253 ng/ml
Flurazepam	5.344	1162049	16026.78	13.2	17924.26	17274	323.4661 ng/ml
Midazolam	5.754	191527	2047.44	88.7	1051.81	83659	246.9515 ng/ml
Tapentadol	4.396	2407604	67274.71	23.6	60631.19	287604	240.3985 ng/ml

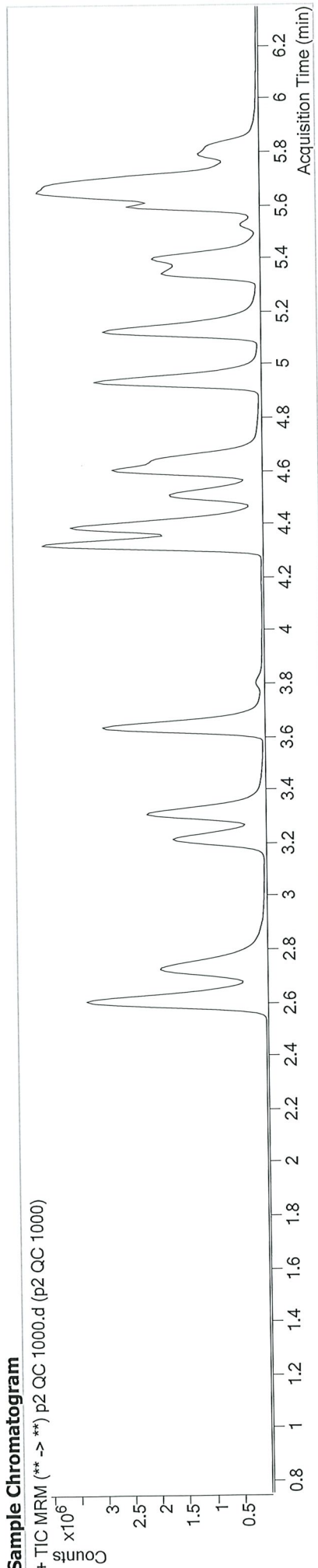
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AM #28 Multi-Drug Quant. Results

Batch results
Calibration Last Update
D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin
11/14/2019 9:43:45 AM

Instrument: Falco
Type: QC
Acq. Method: MDQ P2 Combined 092319.m
Sample Position: P1-E6
Injection Volume: 2
Acq. Date-Time: 11/13/2019 4:47:00 PM
Sample Info:
Data File: p2 QC 1000.d
Sample: p2 QC 1000
Operator:
Comment:



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	2831758	45687.63	25.3	11728.57	208874	892.8755 ng/ml
Etizolam	5.822	1077549	11267.07	26.3	3673.37	42597	1574.6791 ng/ml
Flunitrazepam	5.646	313371	1004.38	42.0	5976.57	8026	836.4181 ng/ml
Flurazepam	5.344	4223592	59680.93	13.5	19827.06	8026	2517.9943 ng/ml
Midazolam	5.754	609300	13291.00	89.2	10486.07	67086	979.9069 ng/ml
Tapentadol	4.396	7783451	489464.34	23.2	43592.33	222085	1005.2549 ng/ml

S.D

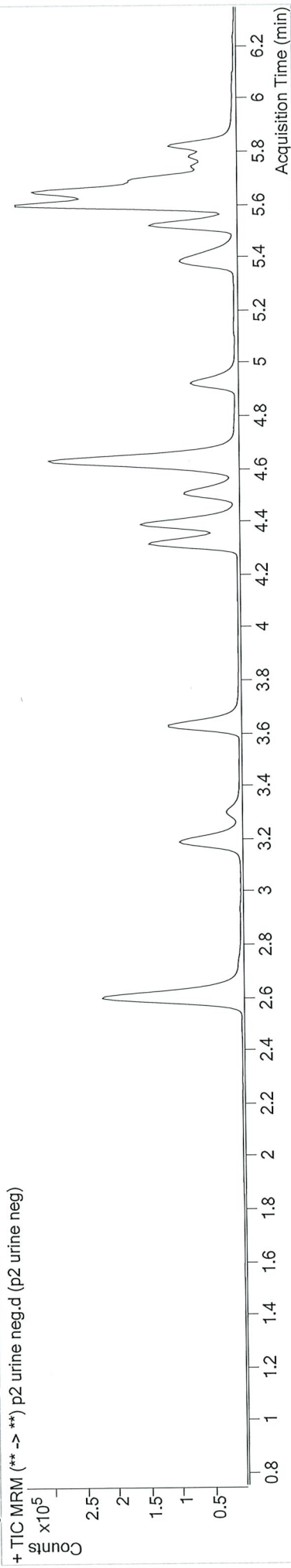


AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin
11/14/2019 9:43:45 AM

Instrument	Falco	Data File	p2 urine neg.d
Type	Sample	Sample	p2 urine neg
Acq. Method	MDQ P2 Combined 092319.m	Operator	
Sample Position	P1-G5	Comment	
Injection Volume	2		
Acq. Date-Time	11/13/2019 7:14:07 PM		
Sample Info.			

Sample Chromatogram



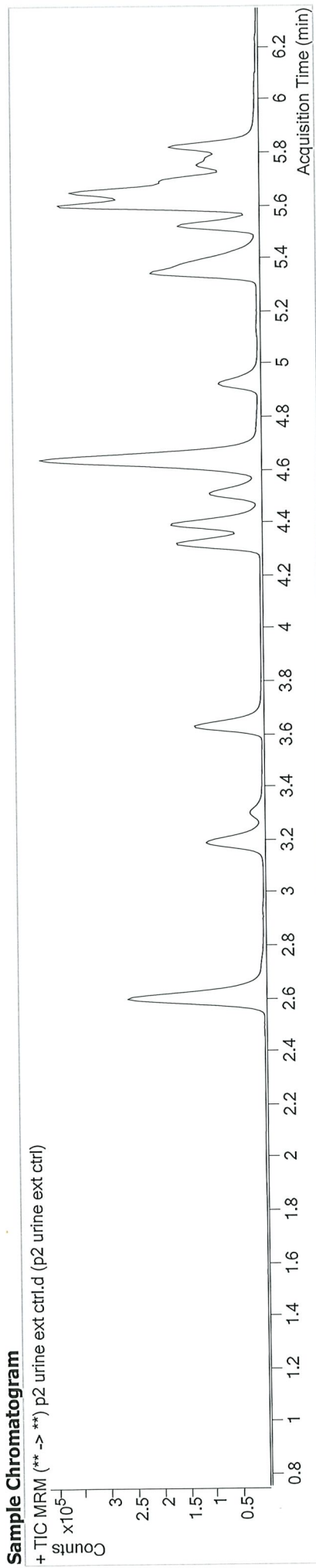
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AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin 11/14/2019 9:43:45 AM

Instrument	Falco	Data File	p2 urine ext ctrl.d
Type	Sample	Sample Operator	p2 urine ext ctrl
Acq. Method	MDQ P2 Combined 092319.m	Comment	
Sample Position	P1-F5		
Injection Volume	2		
Acq. Date-Time	11/13/2019 7:35:09 PM		
Sample Info.			



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	291256	22704.55	24.8	5347.95	326951	58.1001 ng/ml
Etizolam	5.822	112559	8597.19	26.6	1002.17	126841	54.3185 ng/ml
Flurazepam	5.344	472223	894.10	13.4	2629.26	22475	102.2715 ng/ml
Midazolam	5.761	61787	∞	88.0	1060.82	129505	51.4119 ng/ml

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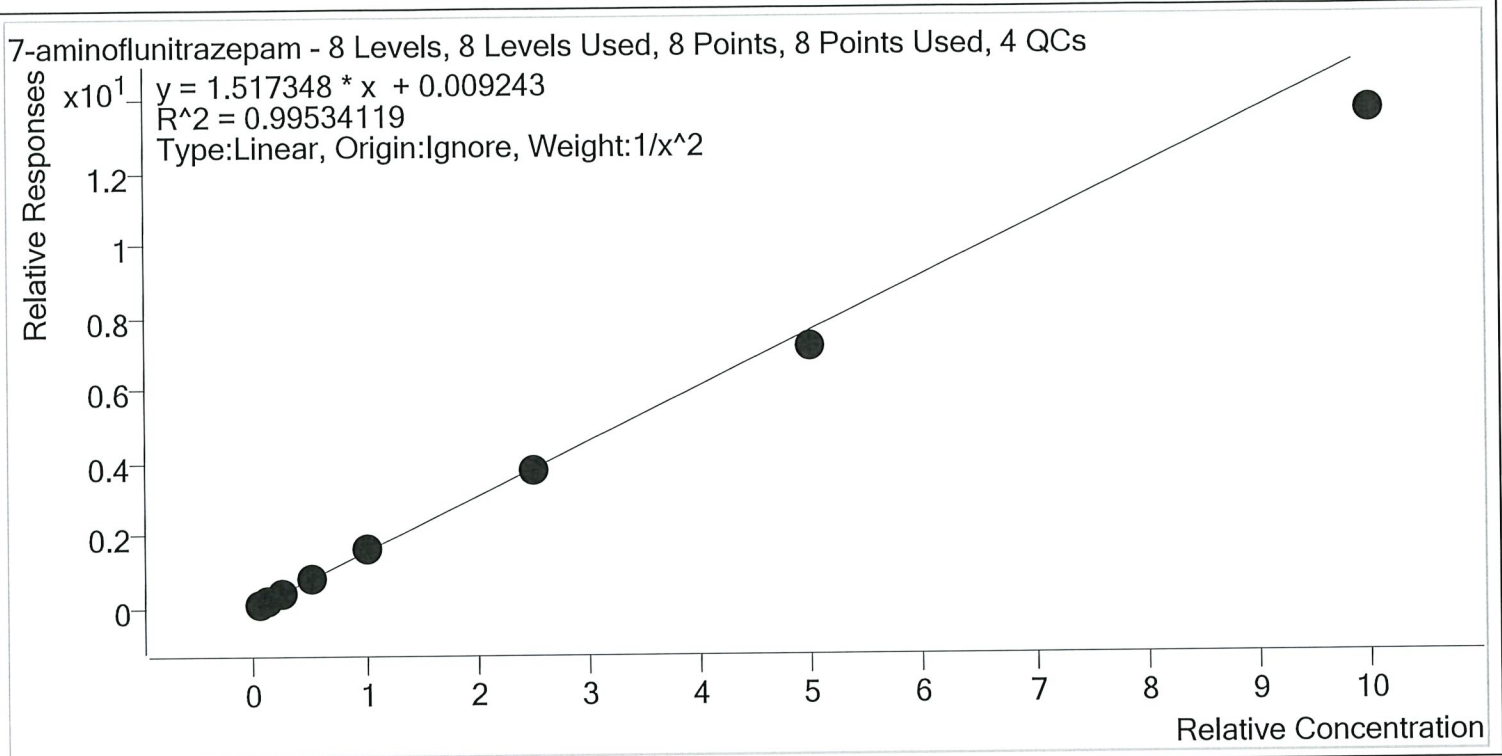
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827
 TS_evaluated compounds.batch.bin

Last Cal. Update 11/14/2019 9:43 AM

Analyst Name ISP\datastor

Analyte 7-aminoflunitrazepam **Internal Standard** 7-aminoflunitrazepam-D7



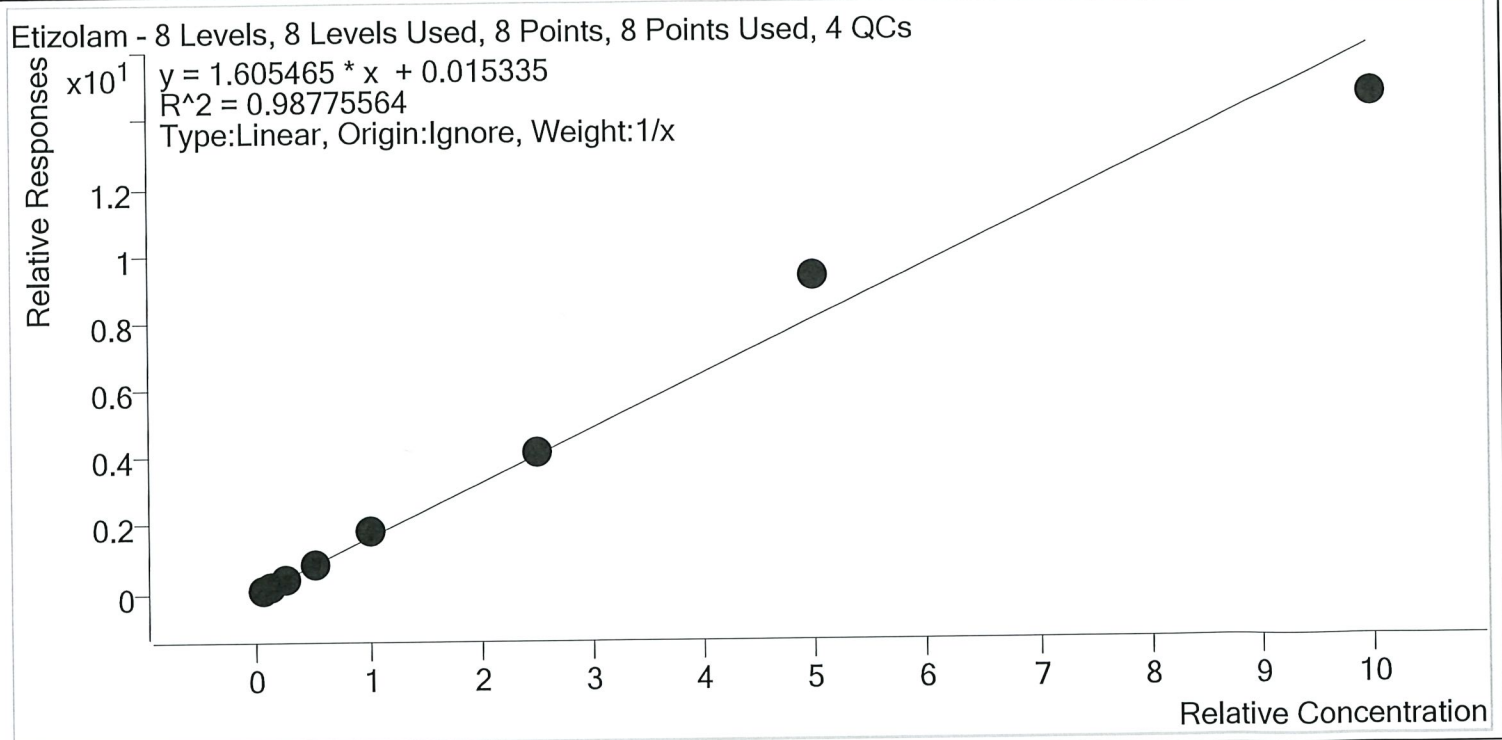
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	4.8	97.0
p2 Cal 2- 10ng	2	✓	10.0	10.2	102.3
p2 Cal 3 -25ng	3	✓	25.0	26.6	106.5
p2 Cal 4-50ng	4	✓	50.0	51.7	103.5
p2 Cal 5-100ng	5	✓	100.0	106.4	106.4
p2 Cal 6-250ng	6	✓	250.0	250.2	100.1
p2 Cal 7-500ng	7	✓	500.0	473.3	94.7
p2 Cal 8-1000ng	8	✓	1000.0	895.9	89.6

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827
 TS_evaluated compounds.batch.bin
Last Cal. Update 11/14/2019 9:43 AM
Analyst Name ISP\datastor
Analyte Etizolam **Internal Standard** Estazolam-D5



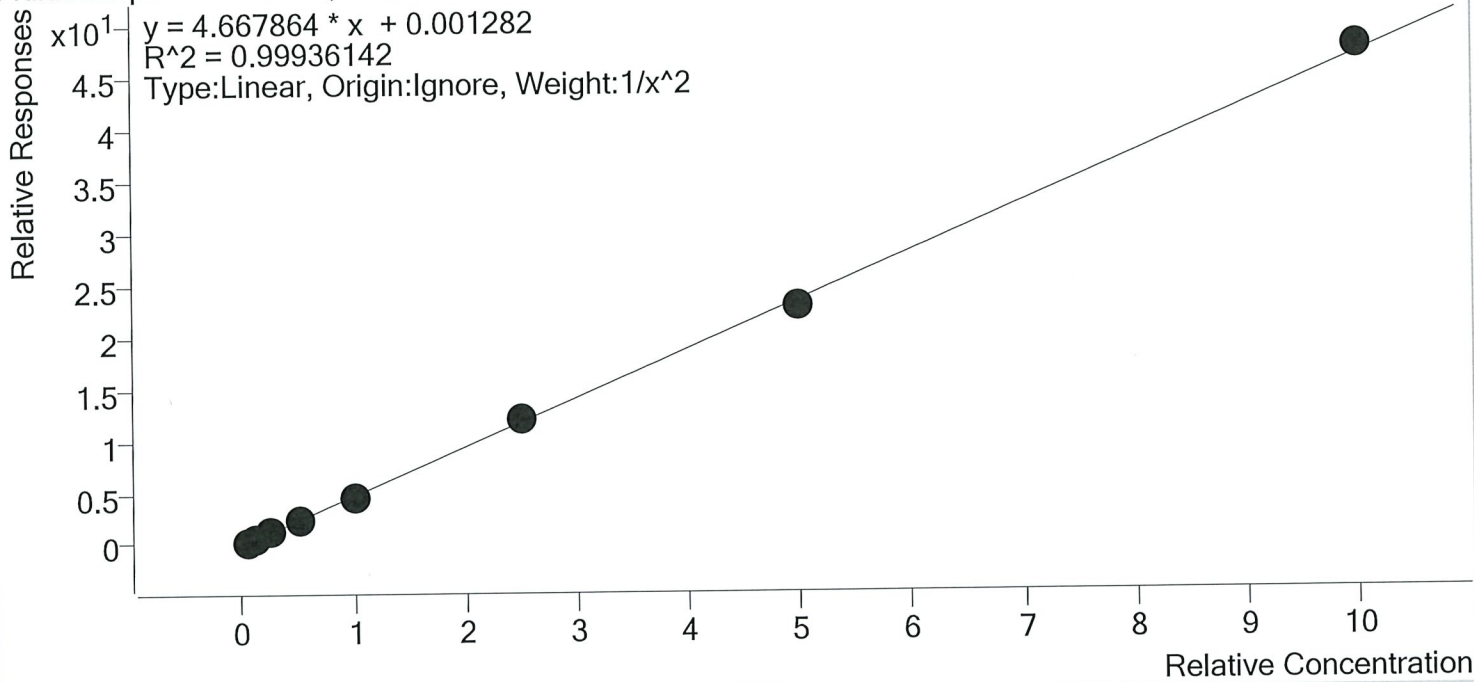
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	4.0	80.3
p2 Cal 2- 10ng	2	✓	10.0	9.4	93.7
p2 Cal 3 -25ng	3	✓	25.0	25.5	101.9
p2 Cal 4-50ng	4	✓	50.0	52.2	104.3
p2 Cal 5-100ng	5	✓	100.0	111.9	111.9
p2 Cal 6-250ng	6	✓	250.0	255.3	102.1
p2 Cal 7-500ng	7	✓	500.0	575.3	115.1
p2 Cal 8-1000ng	8	✓	1000.0	906.5	90.6



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827
 TS_evaluated compounds.batch.bin
Last Cal. Update 11/14/2019 9:43 AM
Analyst Name ISP\datastor
Analyte Flunitrazepam **Internal Standard** Flunitrazepam-D7

Flunitrazepam - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs



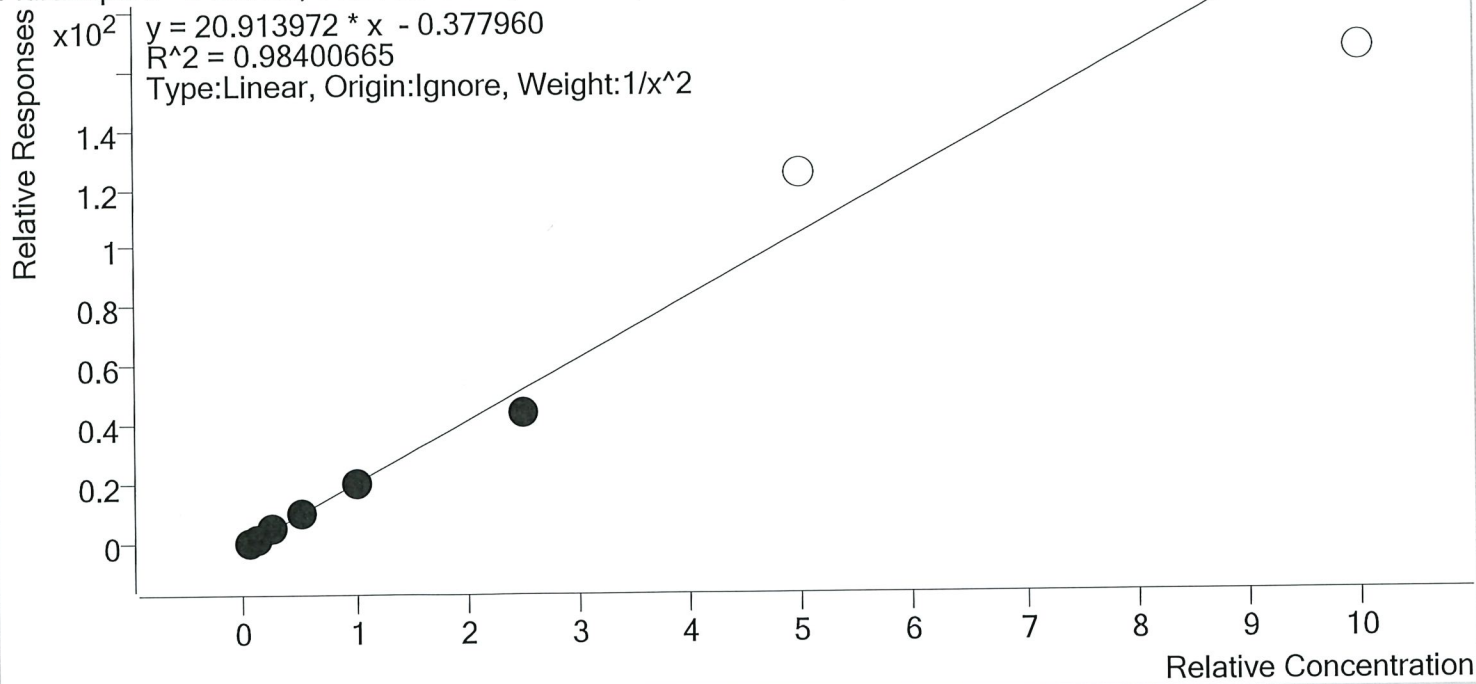
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	4.9	99.0
p2 Cal 2- 10ng	2	✓	10.0	10.2	102.0
p2 Cal 3 -25ng	3	✓	25.0	25.2	100.9
p2 Cal 4-50ng	4	✓	50.0	50.0	100.0
p2 Cal 5-100ng	5	✓	100.0	96.8	96.8
p2 Cal 6-250ng	6	✓	250.0	256.6	102.7
p2 Cal 7-500ng	7	✓	500.0	485.6	97.1
p2 Cal 8-1000ng	8	✓	1000.0	1016.0	101.6



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827
 TS_evaluated compounds.batch.bin
Last Cal. Update 11/14/2019 9:43 AM
Analyst Name ISP\datastor
Analyte Flurazepam **Internal Standard** Flunitrazepam-D7

Flurazepam - 8 Levels, 6 Levels Used, 8 Points, 6 Points Used, 4 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	4.7	93.7
p2 Cal 2- 10ng	2	✓	10.0	10.8	107.5
p2 Cal 3 -25ng	3	✓	25.0	28.6	114.5
p2 Cal 4-50ng	4	✓	50.0	49.2	98.4
p2 Cal 5-100ng	5	✓	100.0	100.9	100.9
p2 Cal 6-250ng	6	✓	250.0	212.2	84.9
p2 Cal 7-500ng	7	×	500.0	599.2	119.8
p2 Cal 8-1000ng	8	×	1000.0	793.3	79.3

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AM #28 Multi-Drug Quant. Calibration Curve Report

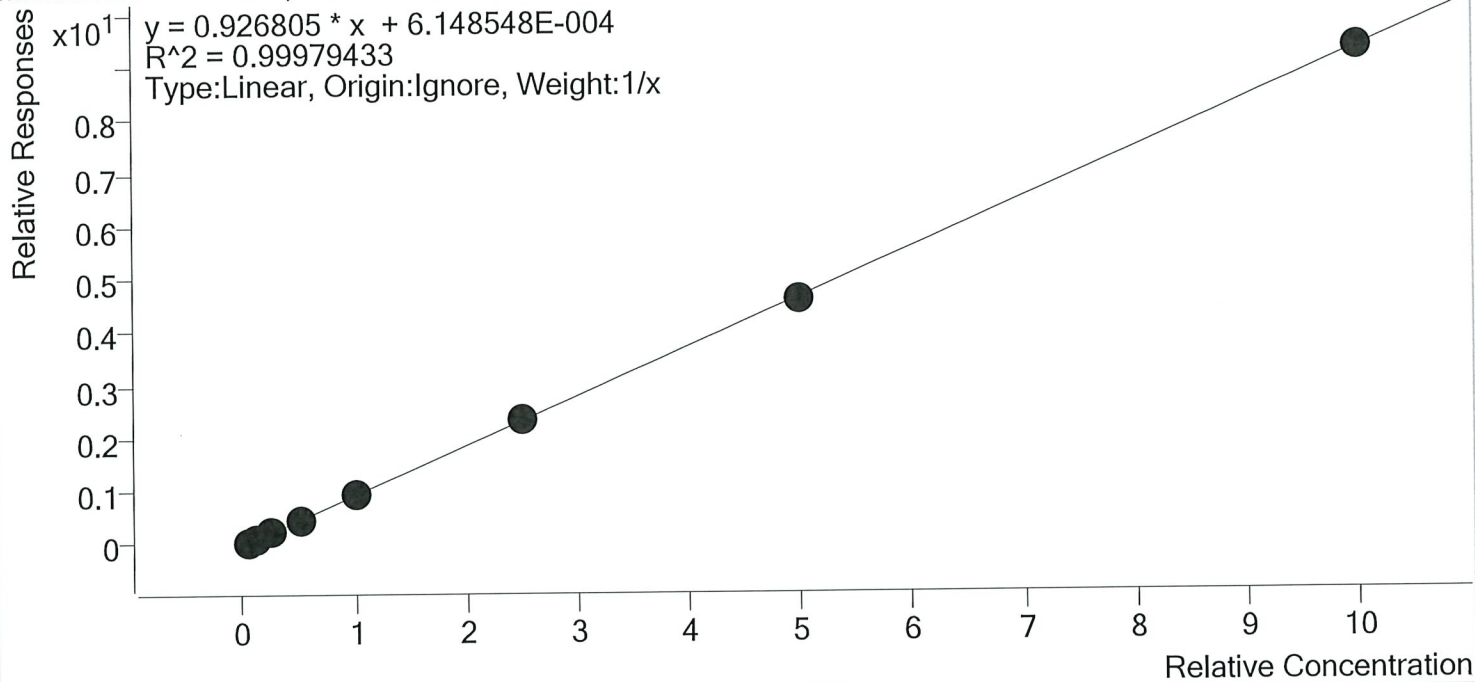
Batch results D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827
 TS_evaluated compounds.batch.bin

Last Cal. Update 11/14/2019 9:43 AM

Analyst Name ISP\datastor

Analyte Midazolam **Internal Standard** Midazolam-D4

Midazolam - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	4.9	98.5
p2 Cal 2- 10ng	2	✓	10.0	10.2	101.7
p2 Cal 3 -25ng	3	✓	25.0	24.7	99.0
p2 Cal 4-50ng	4	✓	50.0	48.2	96.4
p2 Cal 5-100ng	5	✓	100.0	104.1	104.1
p2 Cal 6-250ng	6	✓	250.0	253.5	101.4
p2 Cal 7-500ng	7	✓	500.0	494.0	98.8
p2 Cal 8-1000ng	8	✓	1000.0	1000.3	100.0

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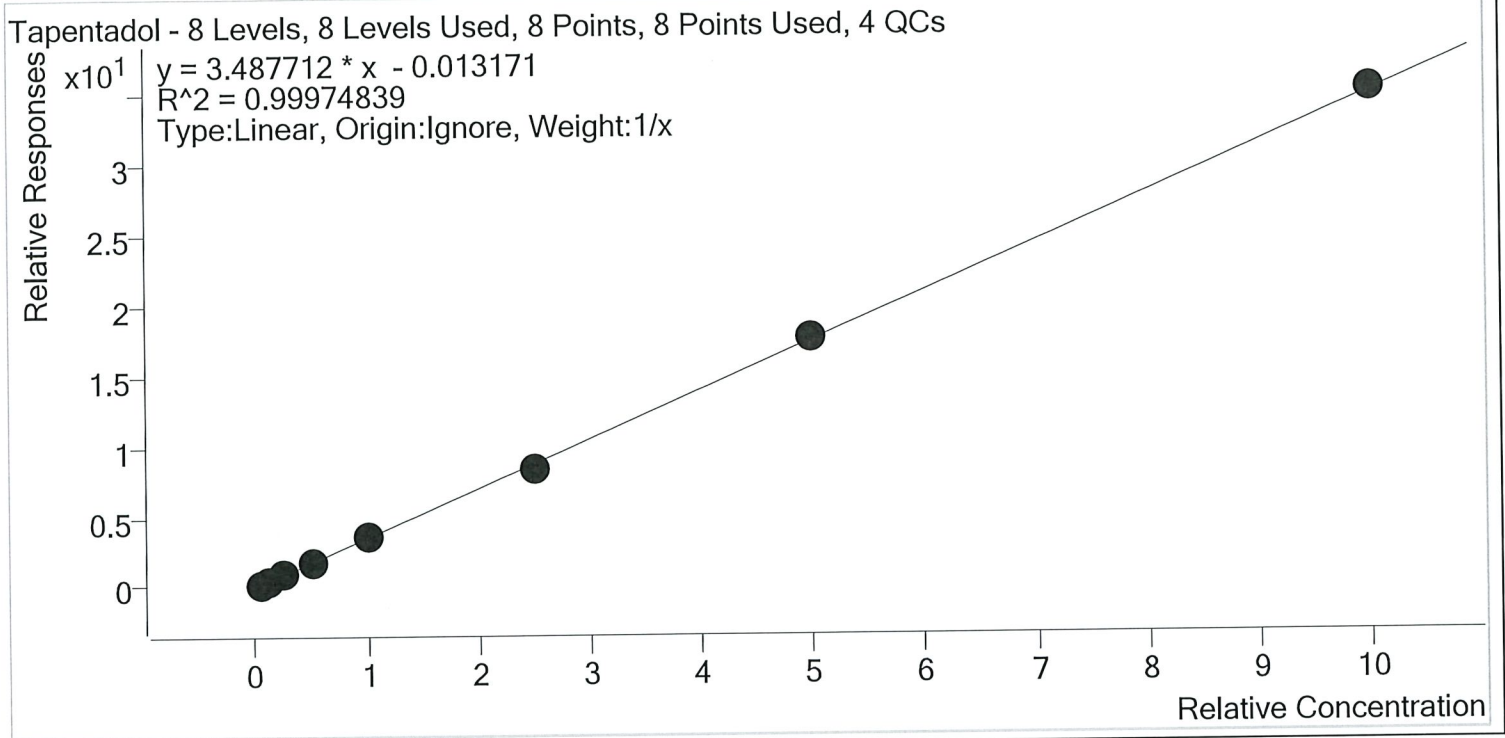
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827
 TS_evaluated compounds.batch.bin

Last Cal. Update 11/14/2019 9:43 AM

Analyst Name ISP\datastor

Analyte Tapentadol **Internal Standard** Tapentadol-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	5.3	106.9
p2 Cal 2- 10ng	2	✓	10.0	10.2	102.3
p2 Cal 3 -25ng	3	✓	25.0	24.2	96.9
p2 Cal 4-50ng	4	✓	50.0	47.5	94.9
p2 Cal 5-100ng	5	✓	100.0	100.6	100.6
p2 Cal 6-250ng	6	✓	250.0	242.9	97.1
p2 Cal 7-500ng	7	✓	500.0	503.2	100.6
p2 Cal 8-1000ng	8	✓	1000.0	1006.1	100.6



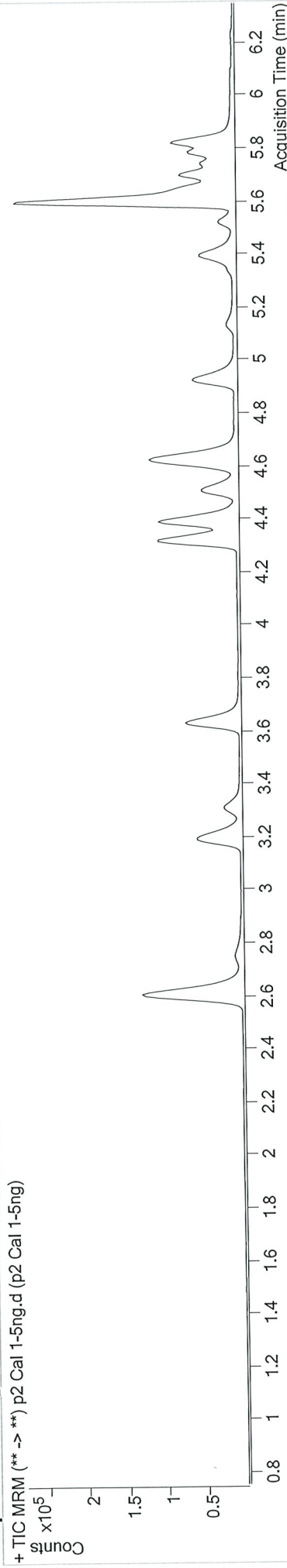
AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin
 11/14/2019 9:43:45 AM

Instrument Falco
 Type Cal
 Acq. Method MDQ P2 Combined 092319.m
 Sample Position P1-H7
 Injection Volume 2
 Acq. Date-Time 11/13/2019 1:48:08 PM
 Sample Info.

Data File
 Sample p2 Cal 1-5ng.d
 Operator p2 Cal 1-5ng
 Comment

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	12327	1253.31	26.0	900.41	148836	4.8493 ng/ml
Etizolam	5.822	7917	14783.89	25.9	445.95	99177	4.0173 ng/ml
Flunitrazepam	5.652	5063	526.15	47.4	567.79	21799	4.9486 ng/ml
Flurazepam	5.344	13129	7531.51	14.1	1854.70	21799	4.6869 ng/ml
Midazolam	5.754	3159	711.90	94.2	∞	68297	4.9249 ng/ml
Tapentadol	4.396	37501	7529.43	23.4	452.16	216537	5.3432 ng/ml

Handwritten initials or signature.



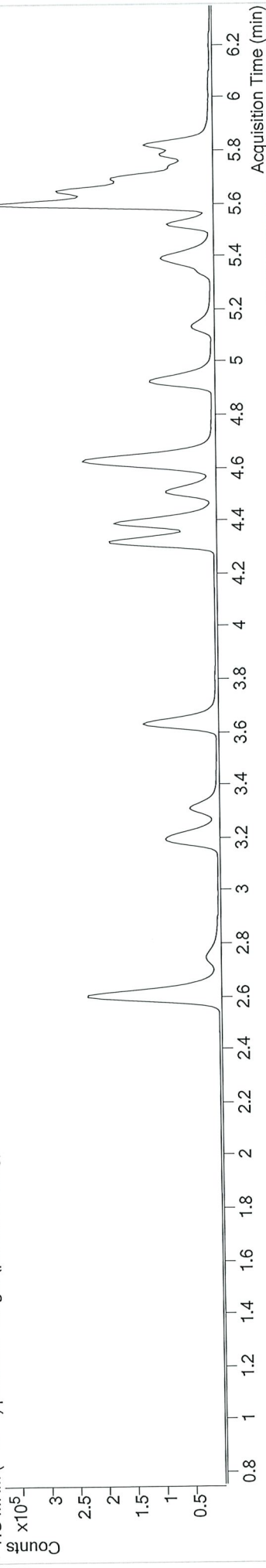
AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin 11/14/2019 9:43:45 AM

Instrument	Falco	Data File	p2 Cal 2- 10ng.d
Type	Cal	Sample	p2 Cal 2- 10ng
Acq. Method	MDQ P2 Combined 092319.m	Operator	
Sample Position	P1-G7	Comment	
Injection Volume	2		
Acq. Date-Time	11/13/2019 1:58:48 PM		
Sample Info.			

Sample Chromatogram

+ TIC MIRM (** -> **) p2 Cal 2- 10ng.d (p2 Cal 2- 10ng)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	40162	4443.94	25.6	∞	244221	10.2288 ng/ml
Etizolam	5.822	19934	∞	26.4	∞	120276	9.3679 ng/ml
Flunitrazepam	5.646	12734	∞	40.3	∞	26683	10.1960 ng/ml
Flurazepam	5.344	49930	384.35	13.5	4362.35	26683	10.7546 ng/ml
Midazolam	5.754	9453	1449.67	88.7	8244.06	99592	10.1746 ng/ml
Tapentadol	4.396	110269	1557.49	23.4	3647.73	320969	10.2280 ng/ml

27

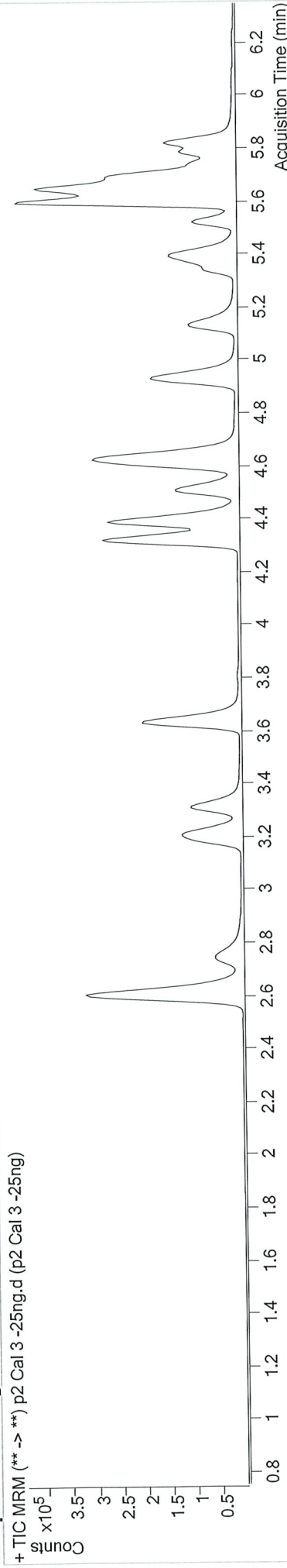


AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin 11/14/2019 9:43:45 AM

Instrument Type Data File
Falco Cal p2 Cal 3 -25ng.d
Cal p2 Cal 3 -25ng
Acq. Method MDQ P2 Combined 092319.m
Sample Position P1-F7
Injection Volume 2
Acq. Date-Time 11/13/2019 2:09:18 PM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	103983	4936.36	24.6	12627.57	26.6354	251534	ng/ml
Etizolam	5.822	47223	∞	27.3	28584.59	25.4875	111236	ng/ml
Flunitrazepam	5.652	29835	∞	41.0	45158.58	25.2153	25320	ng/ml
Flurazepam	5.344	142042	1228.09	12.9	7289.95	28.6303	25320	ng/ml
Midazolam	5.754	22263	3158.81	90.9	∞	24.7454	96812	ng/ml
Tapentadol	4.396	281899	5785.86	23.8	13512.96	24.2328	338822	ng/ml

Handwritten initials or signature.

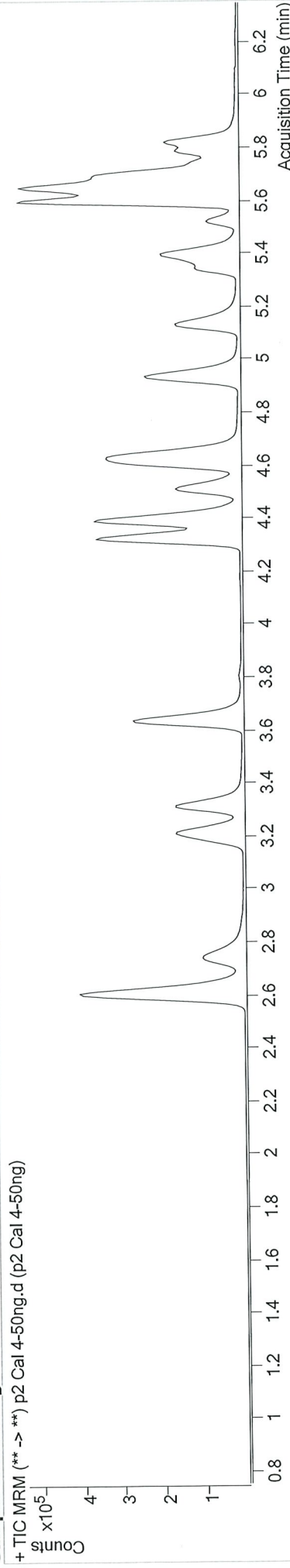


AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin
11/14/2019 9:43:45 AM

Instrument	Falco	Data File	p2 Cal 4-50ng.d
Type	Cal	Sample Operator	p2 Cal 4-50ng
Acq. Method	MDQ P2 Combined 092319.m	Comment	
Sample Position	P1-E7		
Injection Volume	2		
Acq. Date-Time	11/13/2019 2:19:48 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	194112	15266.35	25.2	4306.33	244401	51.7346 ng/ml
Etizolam	5.822	91267	1173.94	26.2	∞	107016	52.1652 ng/ml
Flunitrazepam	5.652	54556	1871.14	42.7	4724.57	23356	50.0122 ng/ml
Flurazepam	5.344	231574	2232.35	13.3	1039.68	23356	49.2147 ng/ml
Midazolam	5.754	41908	1046.97	90.3	∞	93669	48.2073 ng/ml
Tapentadol	4.396	507502	28931.51	23.8	27694.97	309053	47.4607 ng/ml

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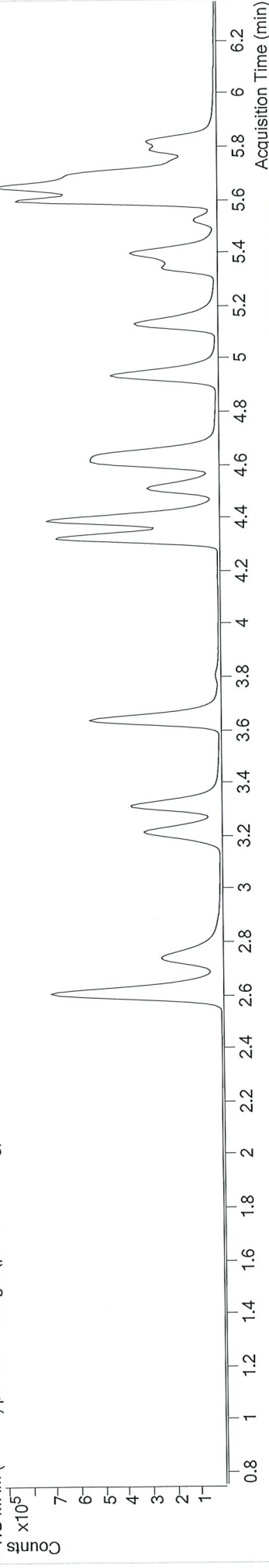
AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wk1st 3827 TS_evaluated compounds.batch.bin
11/14/2019 9:43:45 AM

Instrument Falco
Type Cal
Acq. Method MDQ P2 Combined 092319.m
Sample Position P1-D7
Injection Volume 2
Acq. Date-Time 11/13/2019 2:30:18 PM
Sample Info.
Data File p2 Cal 5-100ng.d
Sample p2 Cal 5-100ng
Operator
Comment

Sample Chromatogram

+ TIC MRM (** -> **) p2 Cal 5-100ng.d (p2 Cal 5-100ng)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	440562	58510.80	25.2	7290.37	271357	106.3901 ng/ml
Etizolam	5.822	198141	3587.33	26.9	354452.96	109397	111.8600 ng/ml
Flunitrazepam	5.652	111538	2339.40	40.5	2843.74	24673	96.8182 ng/ml
Flurazepam	5.344	511273	1379.48	13.3	1006.70	24673	100.8884 ng/ml
Midazolam	5.754	99140	2809.31	90.5	1453.21	102667	104.1251 ng/ml
Tapentadol	4.396	1235897	74055.38	23.6	198462.93	353526	100.6128 ng/ml

AS
S

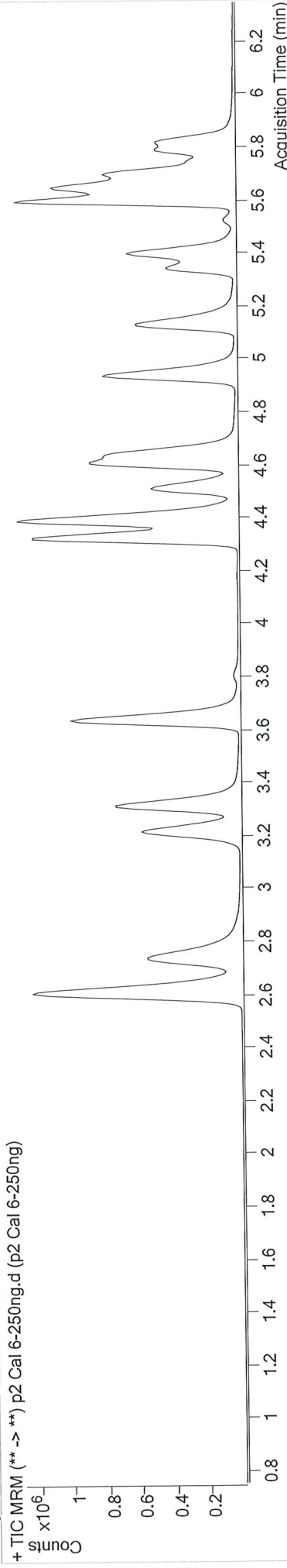


AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin
Calibration Last Update 11/14/2019 9:43:45 AM

Instrument Falco
Type Cal
Acq. Method MDQ P2 Combined 092319.m
Sample Position P1-C7
Injection Volume 2
Acq. Date-Time 11/13/2019 2:40:49 PM
Sample Info. p2 Cal 6-250ng.d
p2 Cal 6-250ng

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	949747	36193.20	25.7	7889.73	249581	250.1818 ng/ml
Etizolam	5.822	404821	14907.53	27.0	3698.09	98393	255.3142 ng/ml
Flunitrazepam	5.652	255470	3172.17	41.2	962.34	21324	256.6346 ng/ml
Flurazepam	5.344	938237	2149.80	12.8	1890.06	21324	212.1931 ng/ml
Midazolam	5.754	208005	1073.96	87.9	1441.73	88502	253.5249 ng/ml
Tapentadol	4.396	2554041	100998.32	23.7	25344.68	301989	242.8692 ng/ml

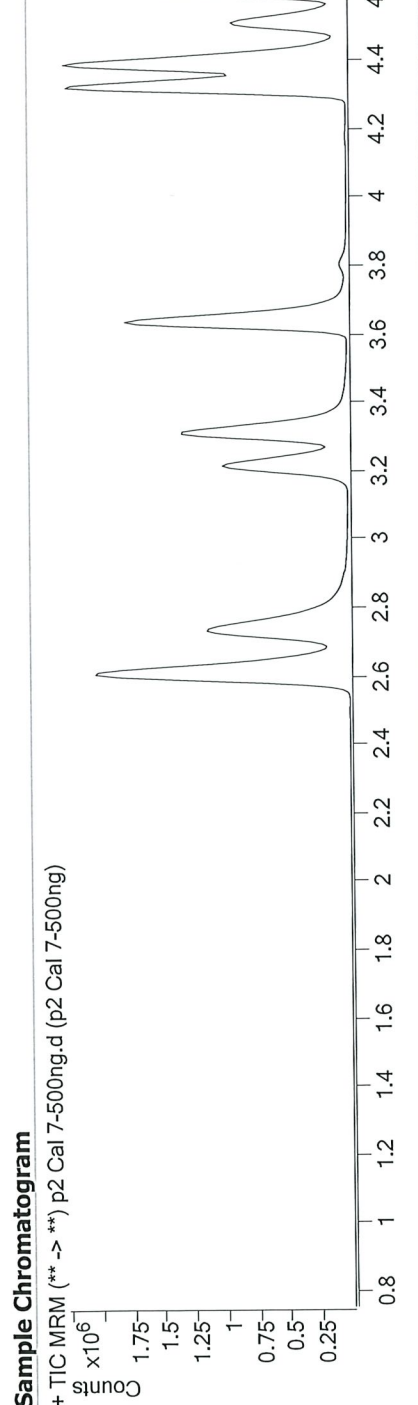
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AM #28 Multi-Drug Quant. Results

Batch results
 Calibration Last Update: D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin
 11/14/2019 9:43:45 AM

Instrument	Falco	Data File	p2 Cal 7-500ng.d
Type	Cal	Sample	p2 Cal 7-500ng
Acq. Method	MDQ P2 Combined 092319.m	Operator	
Sample Position	P1-B7	Comment	
Injection Volume	2		
Acq. Date-Time	11/13/2019 2:51:20 PM		
Sample Info.			



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	1776781	47483.50	25.7	17365.30	247088	473.3024 ng/ml
Etizolam	5.822	738261	3392.67	26.3	4266.31	79797	575.3072 ng/ml
Flunitrazepam	5.646	373590	8127.66	42.3	2885.05	16482	485.5637 ng/ml
Flurazepam	5.337	2059194	195199.71	13.1	1909.88	16482	599.1929 ng/ml
Midazolam	5.754	396426	8000.98	88.4	1718.20	86582	493.9528 ng/ml
Tapentadol	4.396	4756654	194372.35	23.4	42210.36	271244	503.1838 ng/ml

Handwritten initials: "D" and "S"



AM #28 Multi-Drug Quant. Results

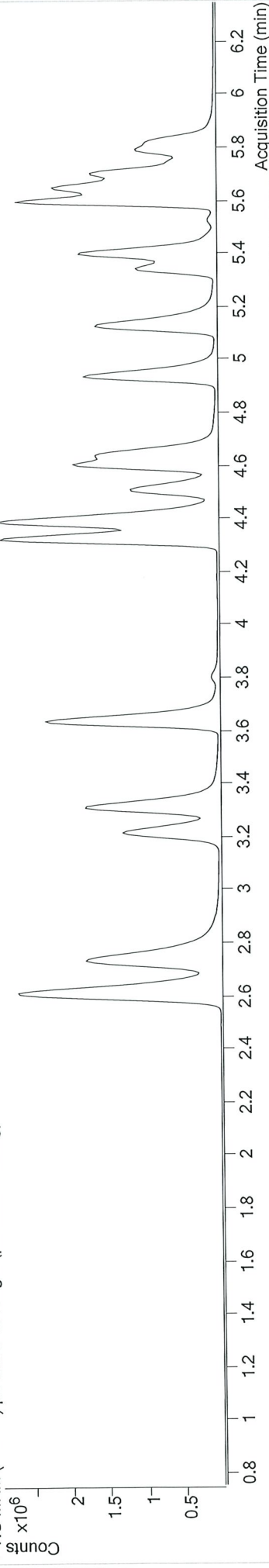
Batch results D:\MassHunter\Data\2019\AM 28\11139 MDQ P1 and P2 TS\QuantResults\MDQ P2 wklist 3827 TS_evaluated compounds.batch.bin
 Calibration Last Update 11/14/2019 9:43:45 AM

Instrument Falco
Type Cal
Acq. Method MDQ P2 Combined 092319.m
Sample Position P1-A7
Injection Volume 2
Acq. Date-Time 11/13/2019 3:01:50 PM
Sample Info.

Data File
Sample p2 Cal 8-1000ng.d
Operator p2 Cal 8-1000ng
Comment

Sample Chromatogram

+ TIC MIRM (** -> **) p2 Cal 8-1000ng.d (p2 Cal 8-1000ng)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
7-aminoflunitrazepam	4.648	2699104	210920.00	25.4	77879.32	198411	895.9268 ng/ml
Etizolam	5.822	1080513	8836.77	26.2	3160.56	74167	906.4807 ng/ml
Flunitrazepam	5.652	727199	20209.89	41.5	3200.98	15334	1015.9722 ng/ml
Flurazepam	5.344	2538138	45975.96	13.3	23287.80	15334	793.2826 ng/ml
Midazolam	5.754	574714	1764.45	88.1	1586.20	61985	1000.3451 ng/ml
Tapentadol	4.396	6434951	∞	23.1	62970.54	183459	1006.0695 ng/ml

S B