

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_Q\Data\PQ121523\
 Data File : PQ064573.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 15 Dec 2023 18:27
 Operator : YP\AJ
 Sample : AR1248CCC500
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_Q
 ClientSampleId :

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 15 22:35:33 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_Q\Method\PQ120823.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Sat Dec 09 05:18:21 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 2 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30Mx0.32mmx 0.50µ Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
1) SA Tetrachlo...	3.456	2.773	202.0E6	243.2E6	48.683	57.920
2) SA Decachlor...	8.689	7.567	155.2E6	226.3E6	52.948	56.058
Target Compounds						
3) L1 AR-1016-1	4.571	3.781	41017389	43415048	321.940	357.208
4) L1 AR-1016-2	4.590	3.797	49758832	47364522	259.241	258.391
5) L1 AR-1016-3	4.648	3.959	25410057	31430088	214.153	323.001 #
6) L1 AR-1016-4	4.741	4.008	26350548	65778212	283.700	787.643 #
7) L1 AR-1016-5	5.032	4.203	68755688	75166849	705.717	742.468
8) L2 AR-1221-1	3.654	2.977	1055584	976431	20.790	17.243
9) L2 AR-1221-2	3.738	3.043	3395442	3937395	92.674	93.470
10) L2 AR-1221-3	3.809	3.122	4058612	5104816	35.890	40.086
11) L3 AR-1232-1	3.809	3.122	4058612	5104816	47.026	52.996
12) L3 AR-1232-2	4.310	3.797	19803495	47364522	405.955	566.619 #
13) L3 AR-1232-3	4.590	3.959	49758832	31430088	582.912	705.940
14) L3 AR-1232-4	4.741	4.044	26350548	62321960	639.614	1631.375 #
15) L3 AR-1232-5	4.840	4.203	58091910	75166849	1899.944	1766.216
16) L4 AR-1242-1	4.571	3.781	41017389	43415048	395.770	418.388
17) L4 AR-1242-2	4.590	3.797	49758832	47364522	320.738	306.584
18) L4 AR-1242-3	4.648	3.959	25410057	31430088	262.342	383.246 #
19) L4 AR-1242-4	4.741	4.044	26350548	62321960	346.621	798.723 #
20) L4 AR-1242-5	5.464	4.542	72835339	99735536	877.375	1034.234
21) L5 AR-1248-1	4.571	3.781	41017389	43415048	526.702	536.579
22) L5 AR-1248-2	4.840	4.008	58091910	65778212	520.542	536.584
23) L5 AR-1248-3	5.032	4.044	68755688	62321960	516.633	534.081
24) L5 AR-1248-4	5.428	4.203	74805961	75166849	522.665	536.203
25) L5 AR-1248-5	5.464	4.579	72835339	70862424	519.444	532.521
26) L6 AR-1254-1	5.399	4.542	59795875	99735536	390.394	476.327
27) L6 AR-1254-2	5.617	4.688	74975466	29821487	321.081	161.213 #
28) L6 AR-1254-3	5.976	5.072	42585873	46067420	173.258	162.834
29) L6 AR-1254-4	6.263	5.300	28869367	31167455	166.154	167.886
30) L6 AR-1254-5	6.678	5.707	7374818	10227628	38.211	39.390
31) L7 AR-1260-1	6.143	5.205	4411471	22962742	23.557	118.738 #
32) L7 AR-1260-2	6.404	5.392	4111830	4454970	18.966	19.142
33) L7 AR-1260-3	6.760	5.530	517117	6006579	3.173	27.633 #
34) L7 AR-1260-4	6.956	5.997	3372769	979948	19.661	5.320 #
35) L7 AR-1260-5	7.291	6.245	1371816	2092878	4.060	4.826
36) L8 AR-1262-1	6.760	5.800	517117	485832	2.102	4.265 #
37) L8 AR-1262-2	7.291	5.997	1371816	979948	3.422	3.847
38) L8 AR-1262-3	7.571	6.525	817735	678101	3.023	3.011
39) L8 AR-1262-4	7.641	6.581	217734	1847856	1.032	4.270 #
40) L8 AR-1262-5	8.149	7.081	104690	760377	0.768	2.897 #
41) L9 AR-1268-1	7.571	6.525	817735	678101	1.710	1.030 #

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_Q\Data\PQ121523\
 Data File : PQ064573.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 15 Dec 2023 18:27
 Operator : YP\AJ
 Sample : AR1248CCC500
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_Q
 ClientSampleId :

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Dec 15 22:35:33 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_Q\Method\PQ120823.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Sat Dec 09 05:18:21 2023
 Response via : Initial Calibration
 Integrator: ChemStation

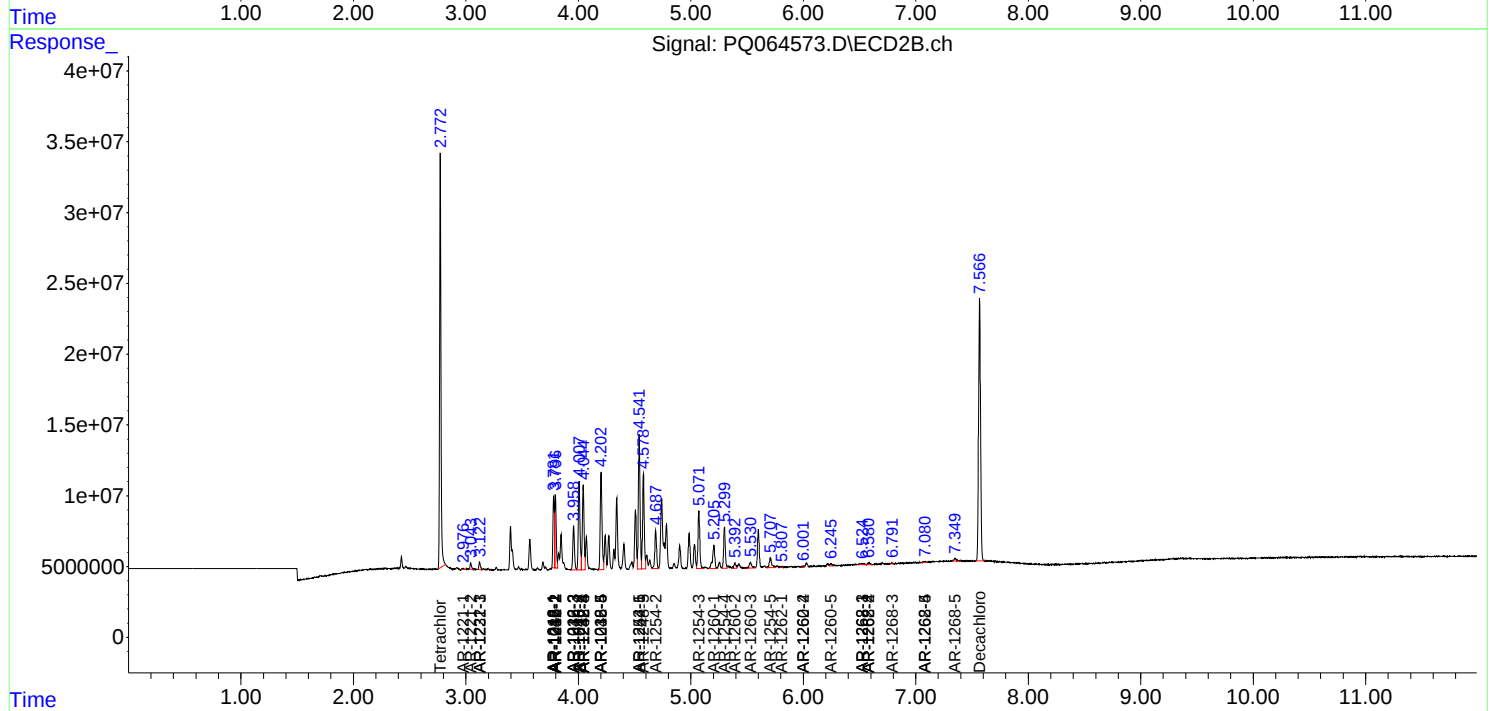
Volume Inj. : 2 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30Mx0.32mmx 0.50µ Signal #2 Info : 30M x 0.32mm x 0.25µm

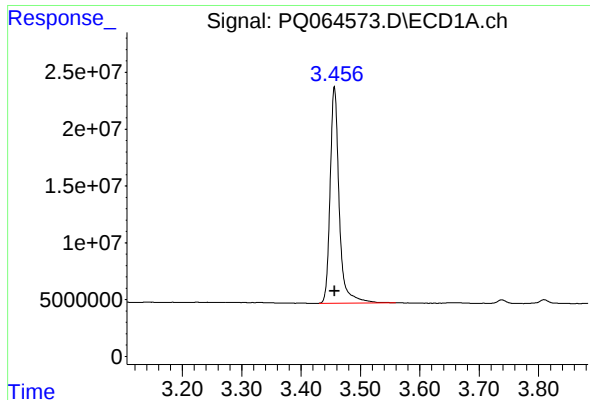
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
42) L9	AR-1268-2	7.641	6.581	217734	1847856	0.501	2.976 #
43) L9	AR-1268-3	7.827	6.790	573832	940454	1.518	1.469
44) L9	AR-1268-4	8.149	7.081	104690	760377	0.684	2.527 #
45) L9	AR-1268-5	8.450	7.349	816129	2613626	0.750	1.384 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Instrument :
ECD_Q
ClientSampleId :

Volume Inj. : 2 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30Mx0.32mmx 0.50µ Signal #2 Info : 30M x 0.32mm x 0.25µm

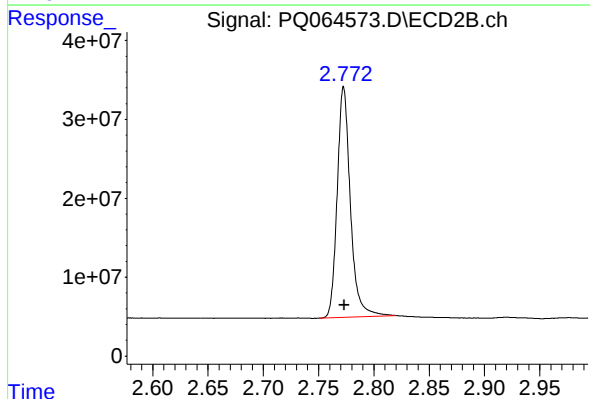




#1 Tetrachloro-m-xylene

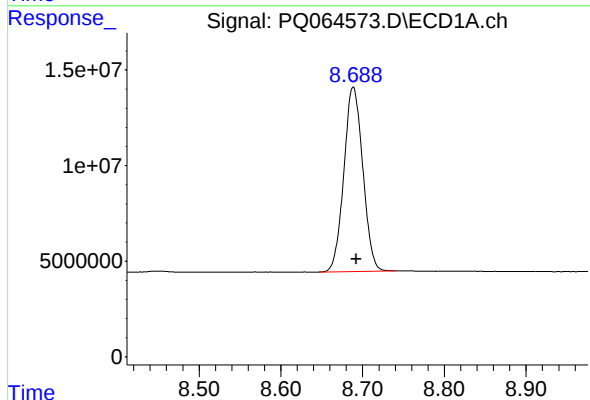
R.T.: 3.456 min
Delta R.T.: 0.000 min
Response: 201967197
Conc: 48.68 ng/ml

Instrument :
ECD_Q
ClientSampleId :



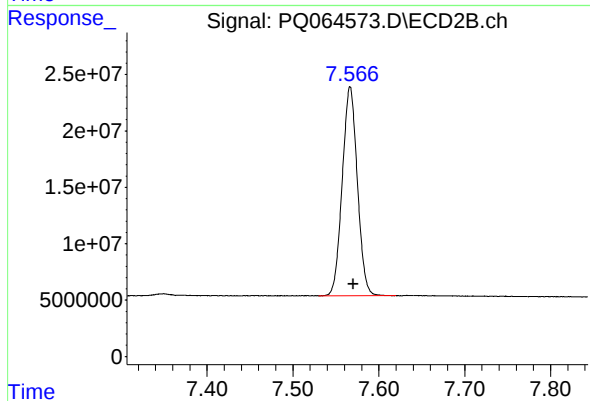
#1 Tetrachloro-m-xylene

R.T.: 2.773 min
Delta R.T.: 0.000 min
Response: 243169304
Conc: 57.92 ng/ml



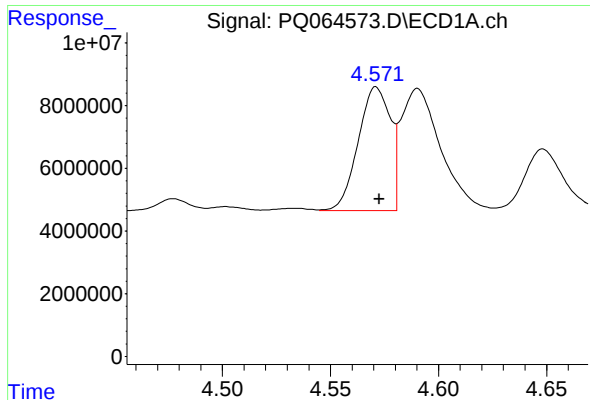
#2 Decachlorobiphenyl

R.T.: 8.689 min
Delta R.T.: -0.004 min
Response: 155212155
Conc: 52.95 ng/ml



#2 Decachlorobiphenyl

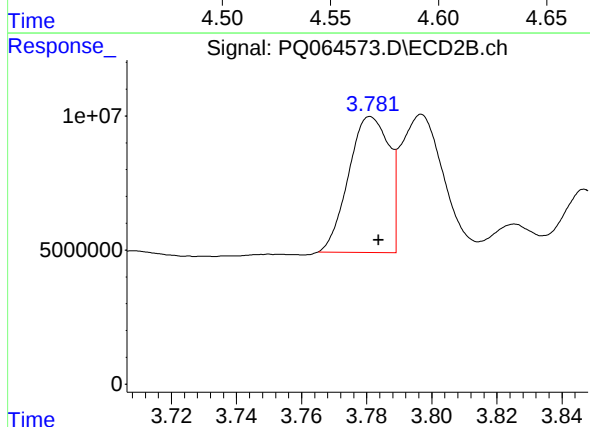
R.T.: 7.567 min
Delta R.T.: -0.004 min
Response: 226261068
Conc: 56.06 ng/ml



#3 AR-1016-1

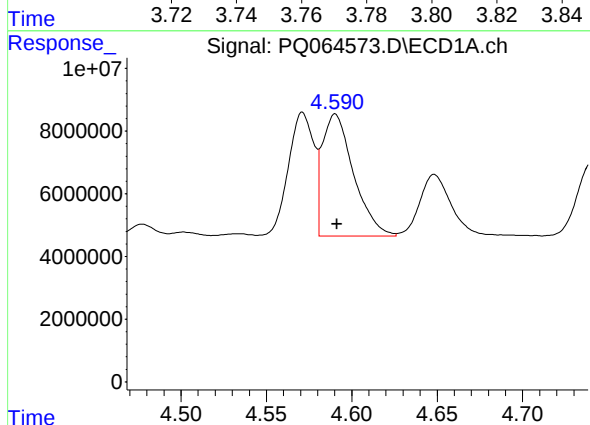
R.T.: 4.571 min
Delta R.T.: -0.001 min
Response: 41017389
Conc: 321.94 ng/ml

Instrument :
ECD_Q
ClientSampleId :



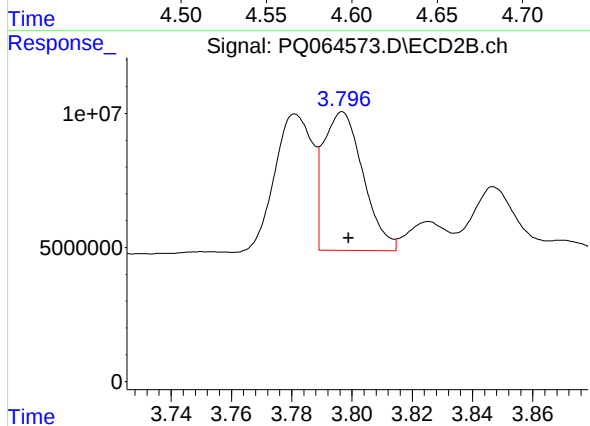
#3 AR-1016-1

R.T.: 3.781 min
Delta R.T.: -0.002 min
Response: 43415048
Conc: 357.21 ng/ml



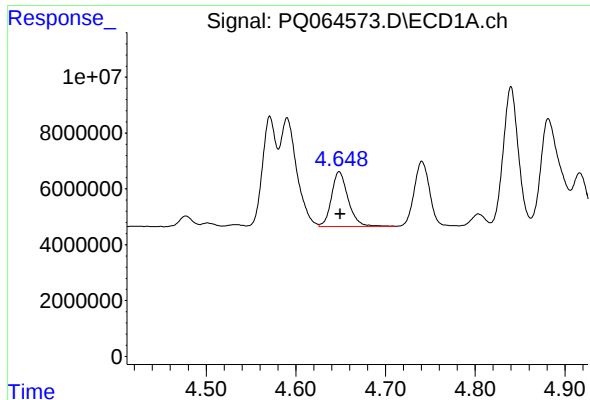
#4 AR-1016-2

R.T.: 4.590 min
Delta R.T.: 0.000 min
Response: 49758832
Conc: 259.24 ng/ml



#4 AR-1016-2

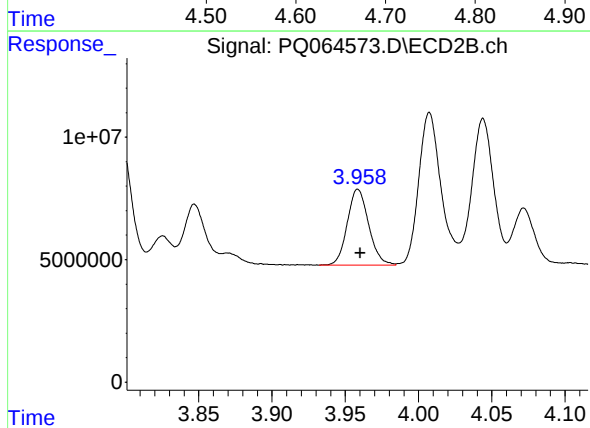
R.T.: 3.797 min
Delta R.T.: -0.002 min
Response: 47364522
Conc: 258.39 ng/ml



#5 AR-1016-3

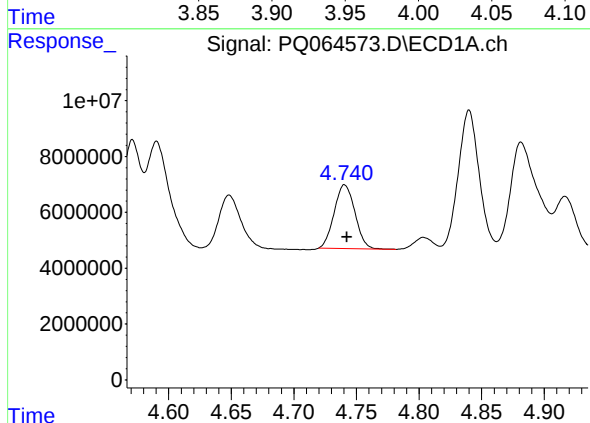
R.T.: 4.648 min
Delta R.T.: -0.001 min
Response: 25410057
Conc: 214.15 ng/ml

Instrument :
ECD_Q
ClientSampleId :



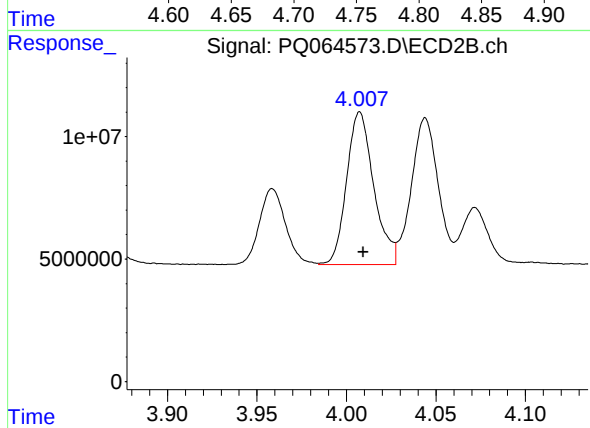
#5 AR-1016-3

R.T.: 3.959 min
Delta R.T.: -0.002 min
Response: 31430088
Conc: 323.00 ng/ml



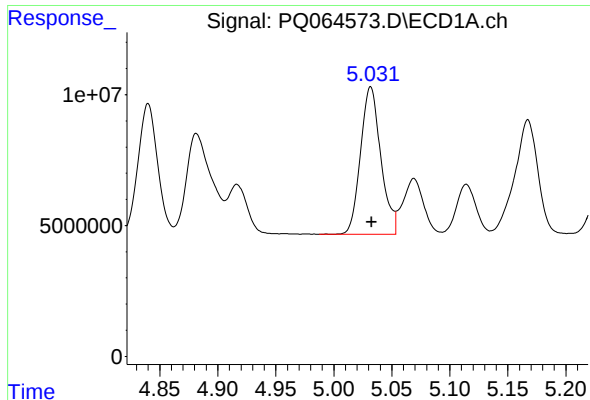
#6 AR-1016-4

R.T.: 4.741 min
Delta R.T.: -0.002 min
Response: 26350548
Conc: 283.70 ng/ml



#6 AR-1016-4

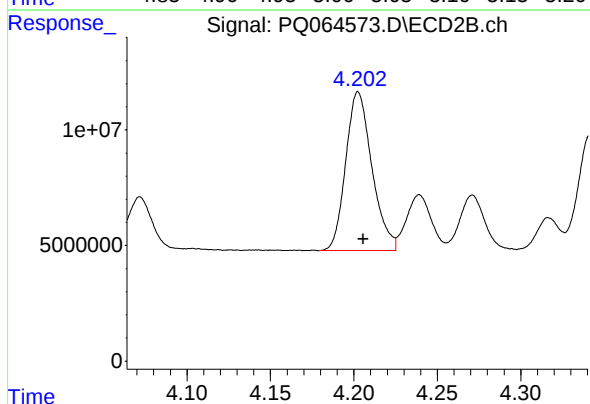
R.T.: 4.008 min
Delta R.T.: -0.002 min
Response: 65778212
Conc: 787.64 ng/ml



#7 AR-1016-5

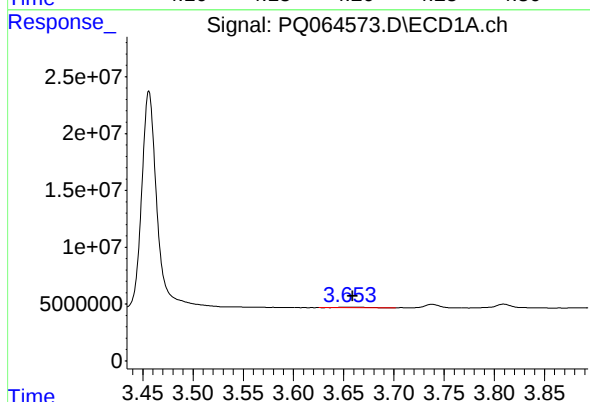
R.T.: 5.032 min
Delta R.T.: 0.000 min
Response: 68755688
Conc: 705.72 ng/ml

Instrument :
ECD_Q
ClientSampleId :



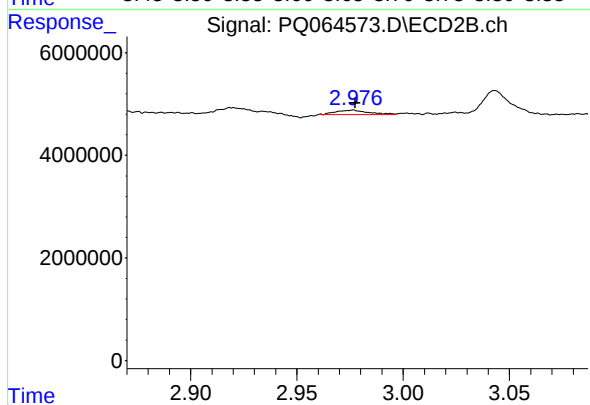
#7 AR-1016-5

R.T.: 4.203 min
Delta R.T.: -0.003 min
Response: 75166849
Conc: 742.47 ng/ml



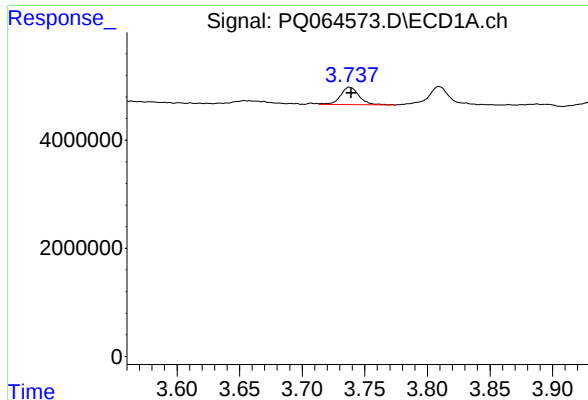
#8 AR-1221-1

R.T.: 3.654 min
Delta R.T.: -0.005 min
Response: 1055584
Conc: 20.79 ng/ml



#8 AR-1221-1

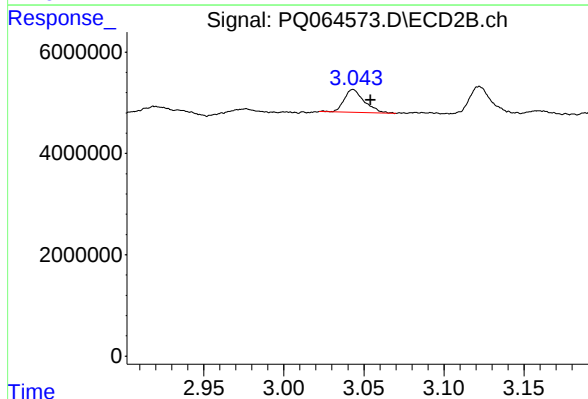
R.T.: 2.977 min
Delta R.T.: 0.000 min
Response: 976431
Conc: 17.24 ng/ml



#9 AR-1221-2

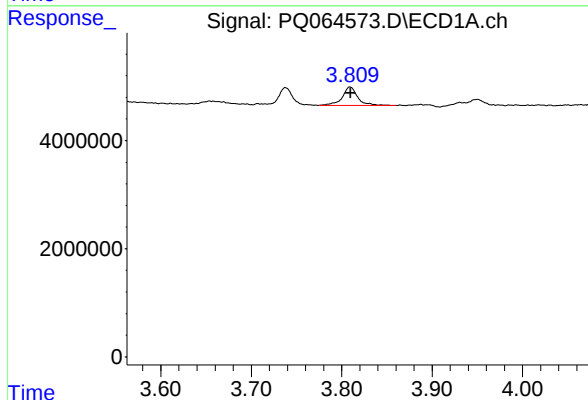
R.T.: 3.738 min
Delta R.T.: -0.001 min
Response: 3395442
Conc: 92.67 ng/ml

Instrument :
ECD_Q
ClientSampleId :



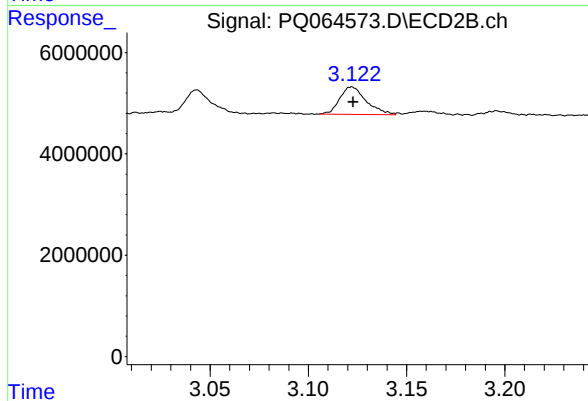
#9 AR-1221-2

R.T.: 3.043 min
Delta R.T.: -0.011 min
Response: 3937395
Conc: 93.47 ng/ml



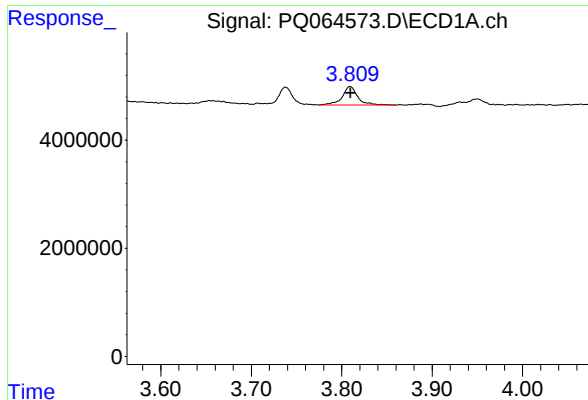
#10 AR-1221-3

R.T.: 3.809 min
Delta R.T.: 0.000 min
Response: 4058612
Conc: 35.89 ng/ml



#10 AR-1221-3

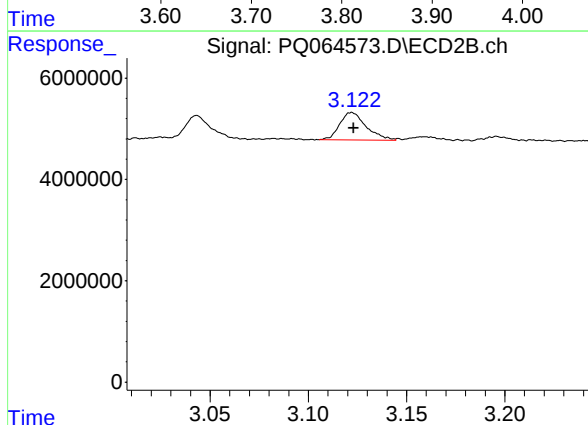
R.T.: 3.122 min
Delta R.T.: 0.000 min
Response: 5104816
Conc: 40.09 ng/ml



#11 AR-1232-1

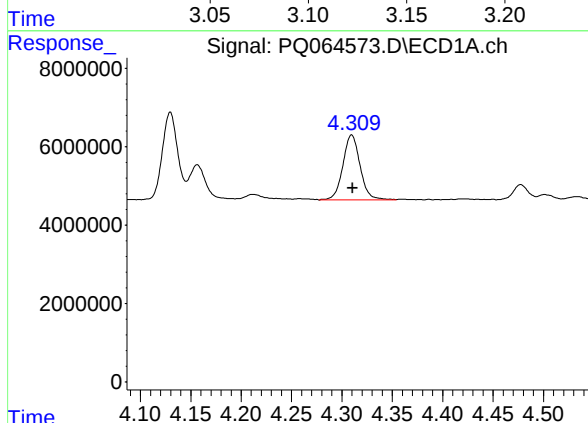
R.T.: 3.809 min
Delta R.T.: 0.000 min
Response: 4058612
Conc: 47.03 ng/ml

Instrument :
ECD_Q
ClientSampleId :



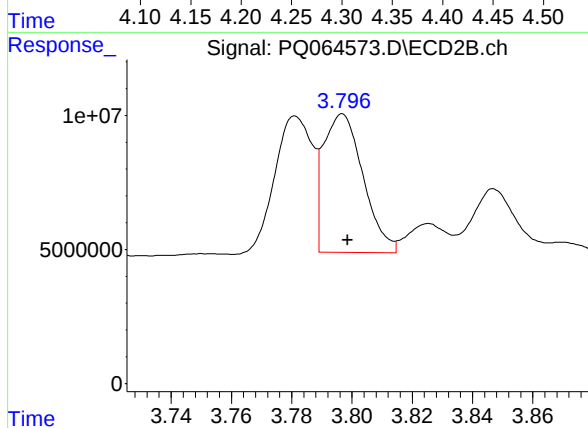
#11 AR-1232-1

R.T.: 3.122 min
Delta R.T.: 0.000 min
Response: 5104816
Conc: 53.00 ng/ml



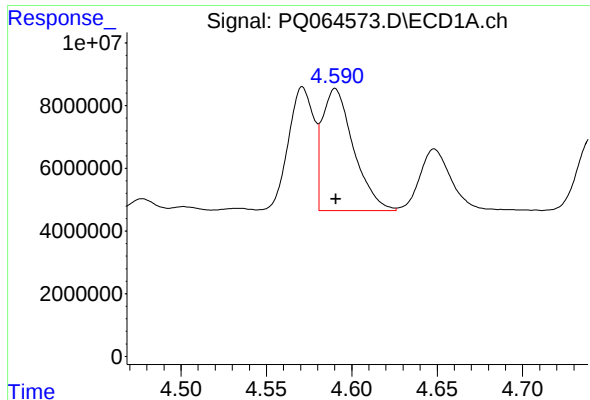
#12 AR-1232-2

R.T.: 4.310 min
Delta R.T.: -0.001 min
Response: 19803495
Conc: 405.95 ng/ml



#12 AR-1232-2

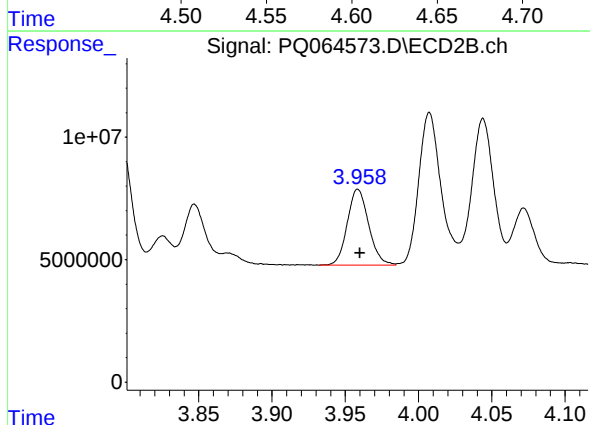
R.T.: 3.797 min
Delta R.T.: -0.002 min
Response: 47364522
Conc: 566.62 ng/ml



#13 AR-1232-3

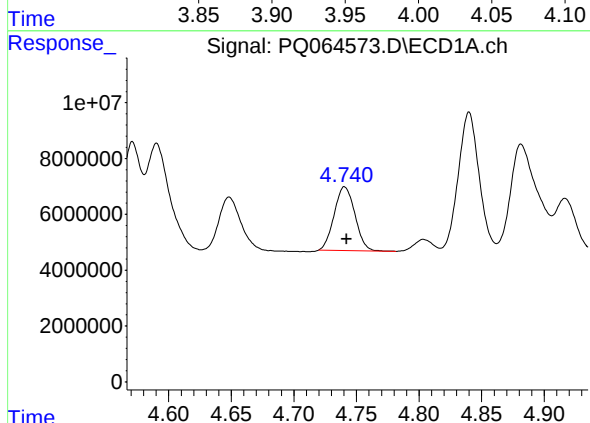
R.T.: 4.590 min
Delta R.T.: 0.000 min
Response: 49758832
Conc: 582.91 ng/ml

Instrument :
ECD_Q
ClientSampleId :



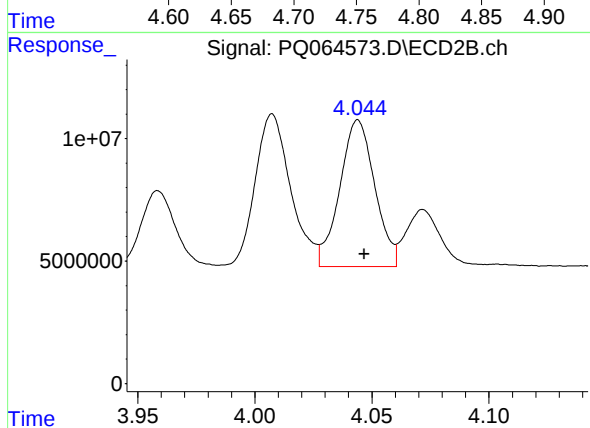
#13 AR-1232-3

R.T.: 3.959 min
Delta R.T.: -0.002 min
Response: 31430088
Conc: 705.94 ng/ml



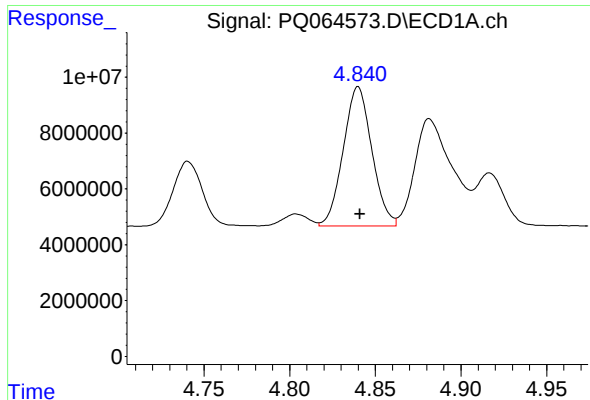
#14 AR-1232-4

R.T.: 4.741 min
Delta R.T.: -0.002 min
Response: 26350548
Conc: 639.61 ng/ml



#14 AR-1232-4

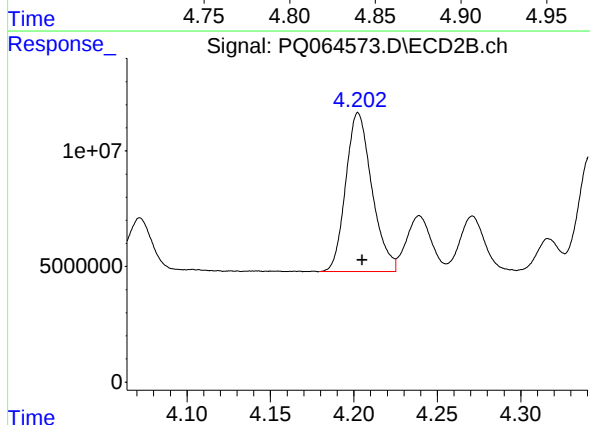
R.T.: 4.044 min
Delta R.T.: -0.003 min
Response: 62321960
Conc: 1631.37 ng/ml



#15 AR-1232-5

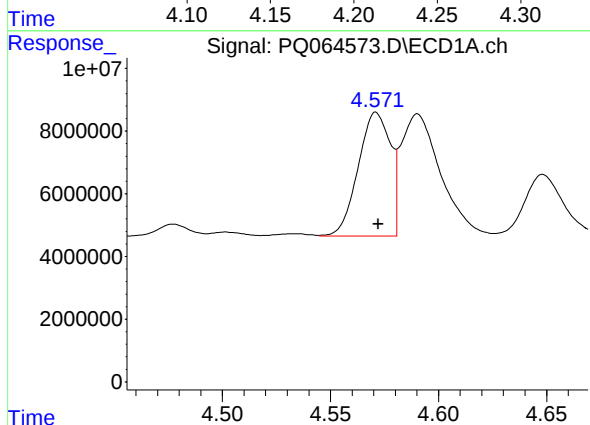
R.T.: 4.840 min
Delta R.T.: -0.001 min
Response: 58091910
Conc: 1899.94 ng/ml

Instrument :
ECD_Q
ClientSampleId :



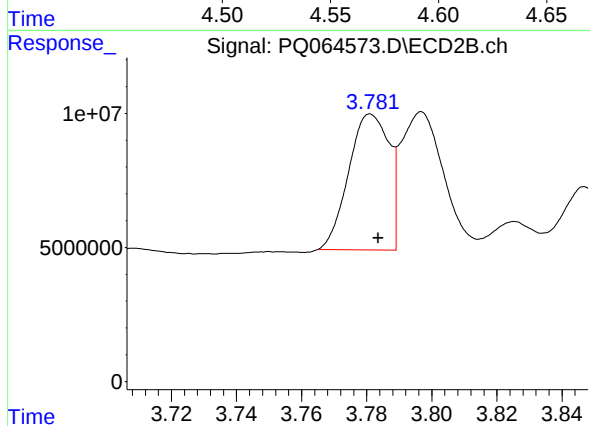
#15 AR-1232-5

R.T.: 4.203 min
Delta R.T.: -0.003 min
Response: 75166849
Conc: 1766.22 ng/ml



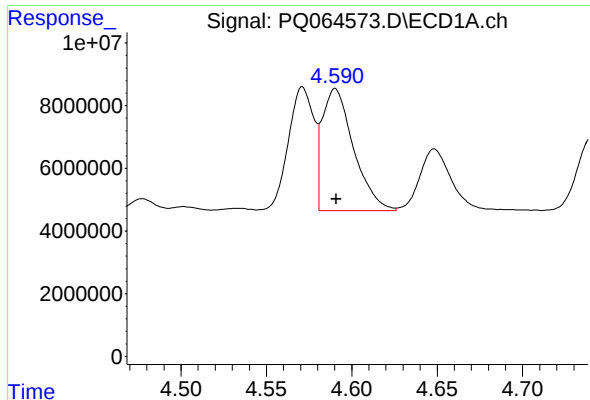
#16 AR-1242-1

R.T.: 4.571 min
Delta R.T.: 0.000 min
Response: 41017389
Conc: 395.77 ng/ml



#16 AR-1242-1

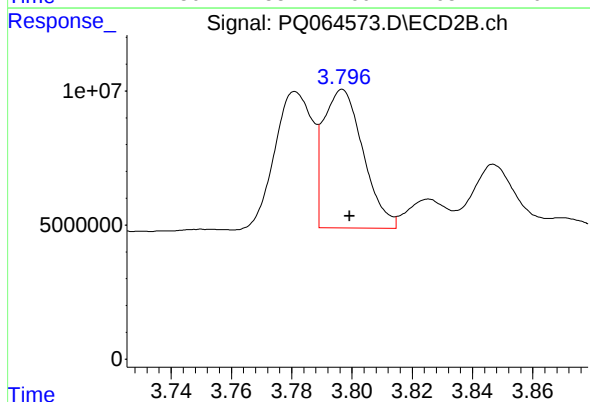
R.T.: 3.781 min
Delta R.T.: -0.002 min
Response: 43415048
Conc: 418.39 ng/ml



#17 AR-1242-2

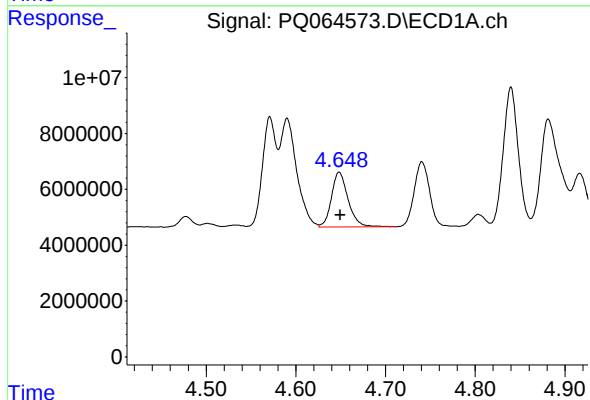
R.T.: 4.590 min
Delta R.T.: 0.000 min
Response: 49758832
Conc: 320.74 ng/ml

Instrument :
ECD_Q
ClientSampleId :



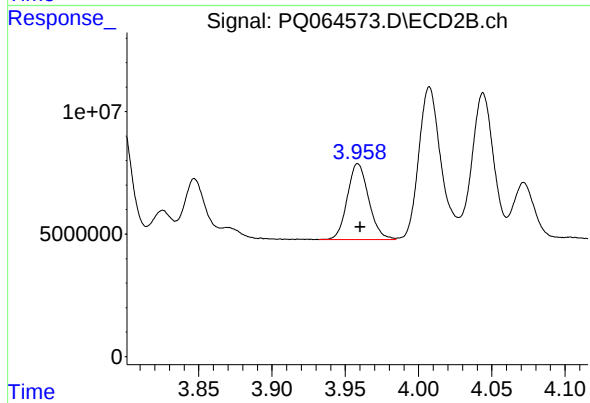
#17 AR-1242-2

R.T.: 3.797 min
Delta R.T.: -0.002 min
Response: 47364522
Conc: 306.58 ng/ml



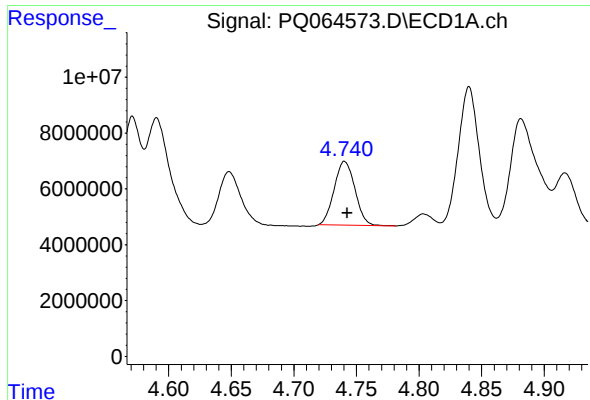
#18 AR-1242-3

R.T.: 4.648 min
Delta R.T.: -0.001 min
Response: 25410057
Conc: 262.34 ng/ml



#18 AR-1242-3

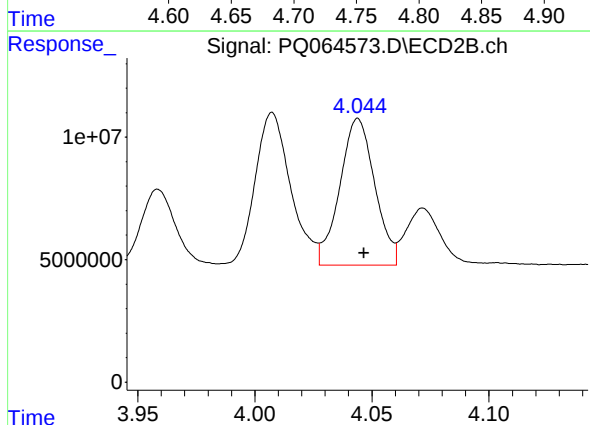
R.T.: 3.959 min
Delta R.T.: -0.002 min
Response: 31430088
Conc: 383.25 ng/ml



#19 AR-1242-4

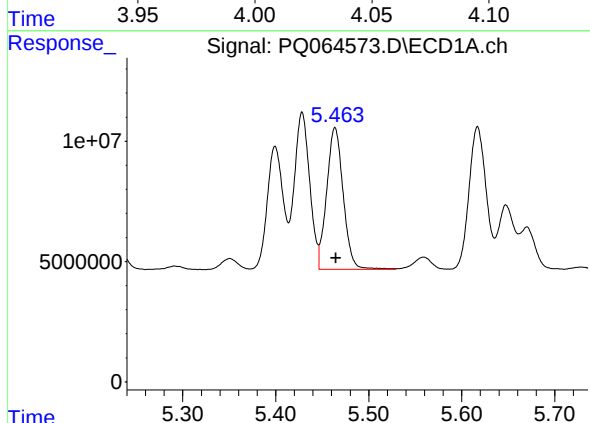
R.T.: 4.741 min
Delta R.T.: -0.002 min
Response: 26350548
Conc: 346.62 ng/ml

Instrument :
ECD_Q
ClientSampleId :



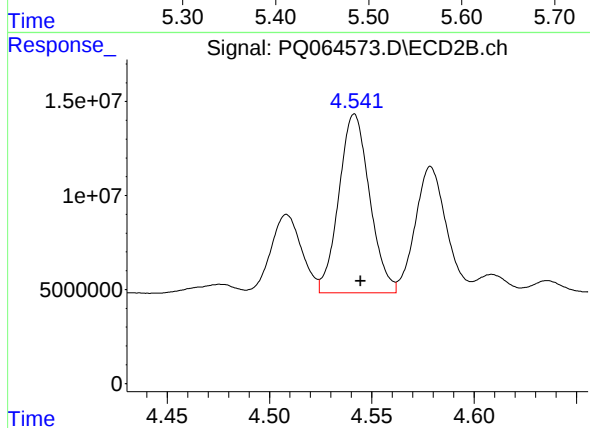
#19 AR-1242-4

R.T.: 4.044 min
Delta R.T.: -0.003 min
Response: 62321960
Conc: 798.72 ng/ml



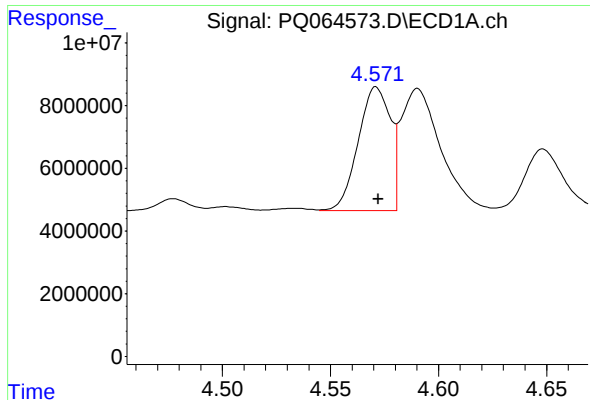
#20 AR-1242-5

R.T.: 5.464 min
Delta R.T.: -0.001 min
Response: 72835339
Conc: 877.37 ng/ml



#20 AR-1242-5

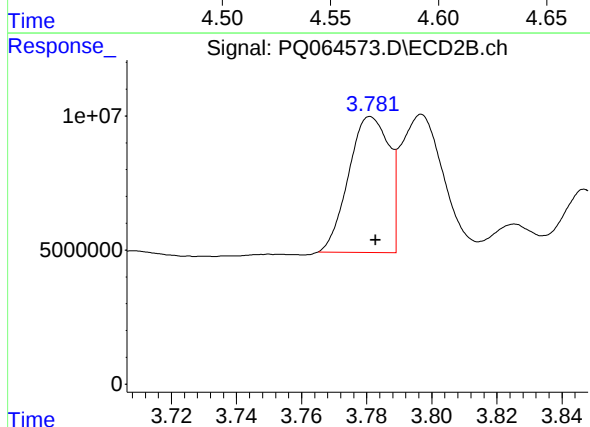
R.T.: 4.542 min
Delta R.T.: -0.003 min
Response: 99735536
Conc: 1034.23 ng/ml



#21 AR-1248-1

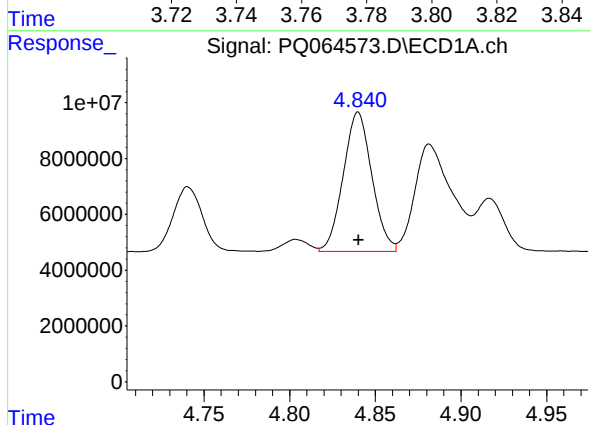
R.T.: 4.571 min
Delta R.T.: 0.000 min
Response: 41017389
Conc: 526.70 ng/ml

Instrument :
ECD_Q
ClientSampleId :



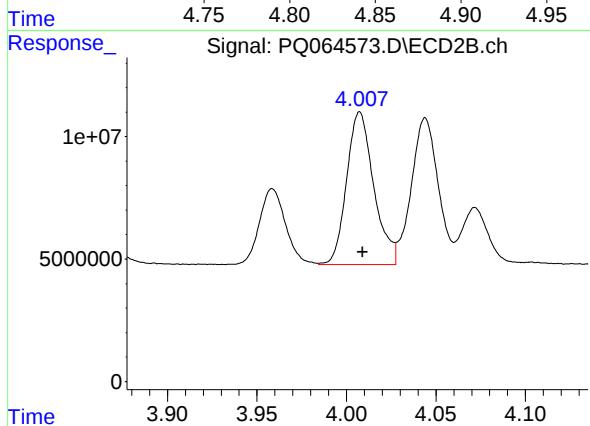
#21 AR-1248-1

R.T.: 3.781 min
Delta R.T.: -0.002 min
Response: 43415048
Conc: 536.58 ng/ml



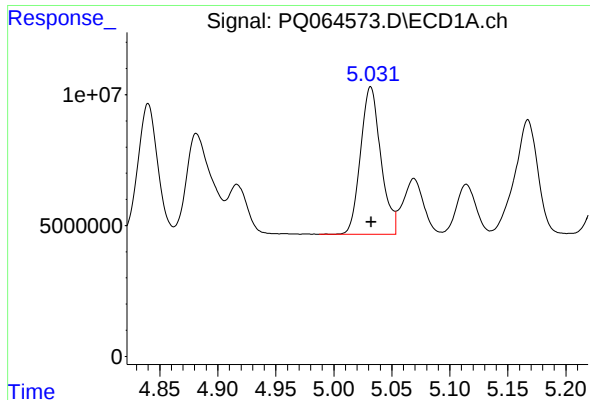
#22 AR-1248-2

R.T.: 4.840 min
Delta R.T.: 0.000 min
Response: 58091910
Conc: 520.54 ng/ml



#22 AR-1248-2

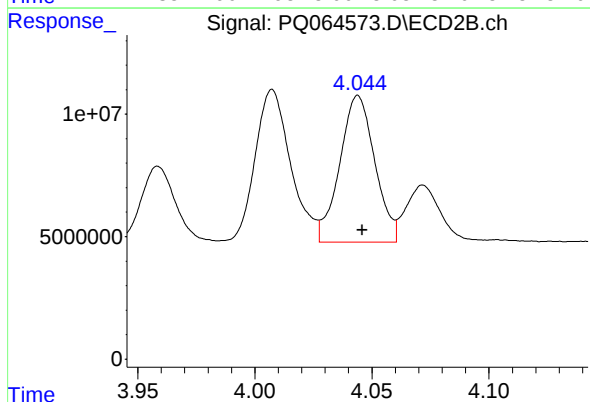
R.T.: 4.008 min
Delta R.T.: -0.002 min
Response: 65778212
Conc: 536.58 ng/ml



#23 AR-1248-3

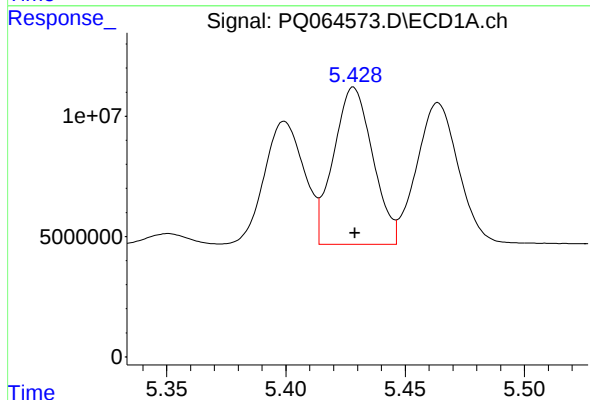
R.T.: 5.032 min
Delta R.T.: 0.000 min
Response: 68755688
Conc: 516.63 ng/ml

Instrument :
ECD_Q
ClientSampleId :



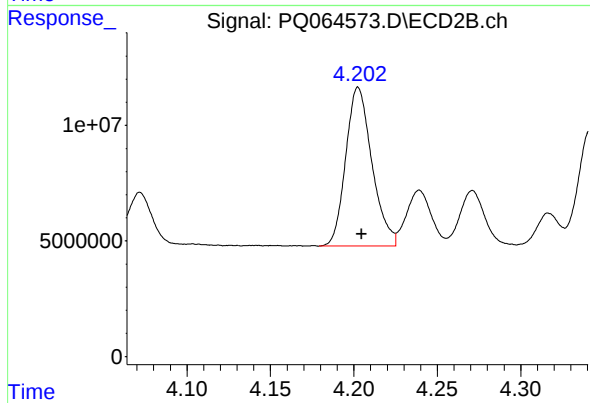
#23 AR-1248-3

R.T.: 4.044 min
Delta R.T.: -0.002 min
Response: 62321960
Conc: 534.08 ng/ml



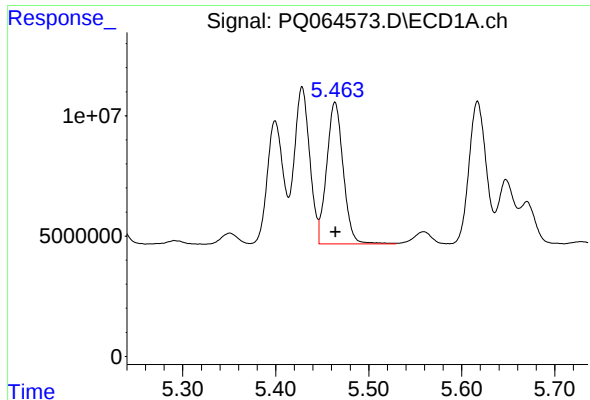
#24 AR-1248-4

R.T.: 5.428 min
Delta R.T.: 0.000 min
Response: 74805961
Conc: 522.67 ng/ml



#24 AR-1248-4

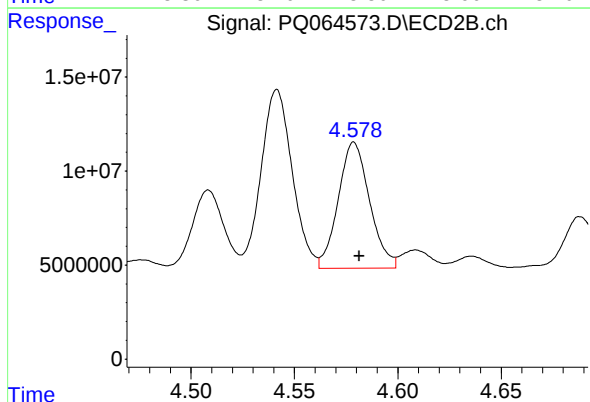
R.T.: 4.203 min
Delta R.T.: -0.002 min
Response: 75166849
Conc: 536.20 ng/ml



#25 AR-1248-5

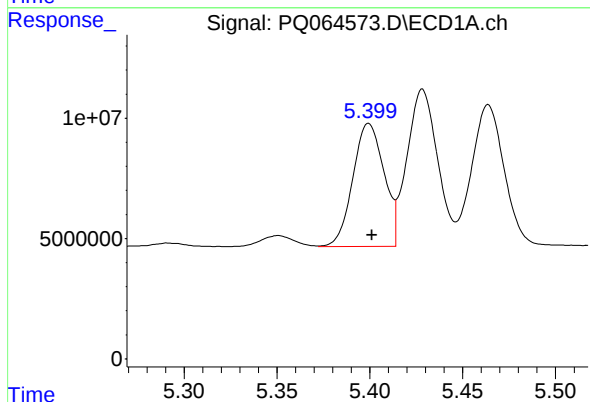
R.T.: 5.464 min
Delta R.T.: 0.000 min
Response: 72835339
Conc: 519.44 ng/ml

Instrument :
ECD_Q
ClientSampleId :



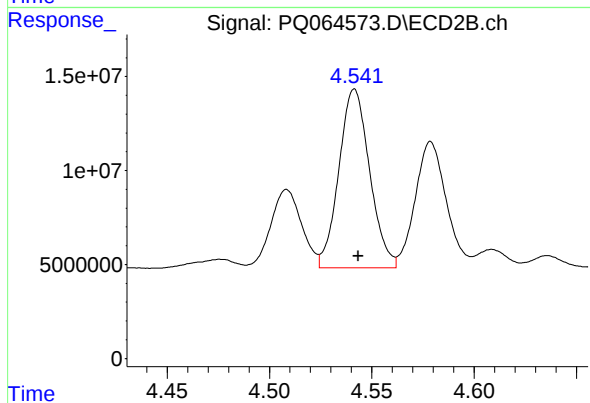
#25 AR-1248-5

R.T.: 4.579 min
Delta R.T.: -0.003 min
Response: 70862424
Conc: 532.52 ng/ml



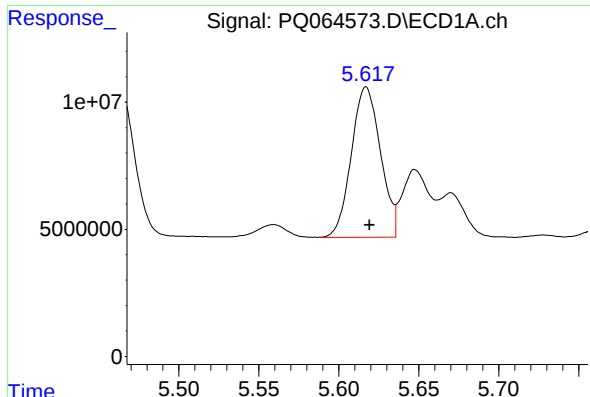
#26 AR-1254-1

R.T.: 5.399 min
Delta R.T.: -0.002 min
Response: 59795875
Conc: 390.39 ng/ml



#26 AR-1254-1

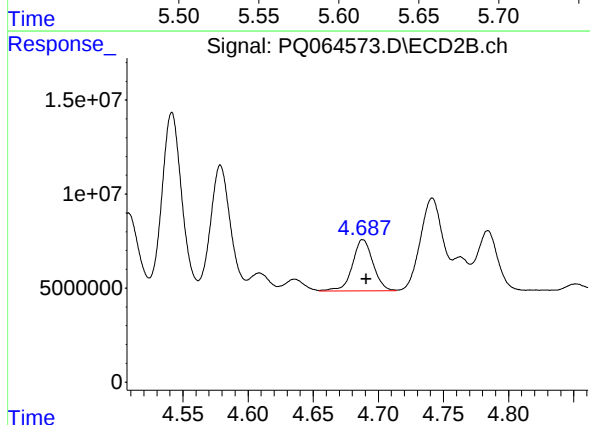
R.T.: 4.542 min
Delta R.T.: -0.002 min
Response: 99735536
Conc: 476.33 ng/ml



#27 AR-1254-2

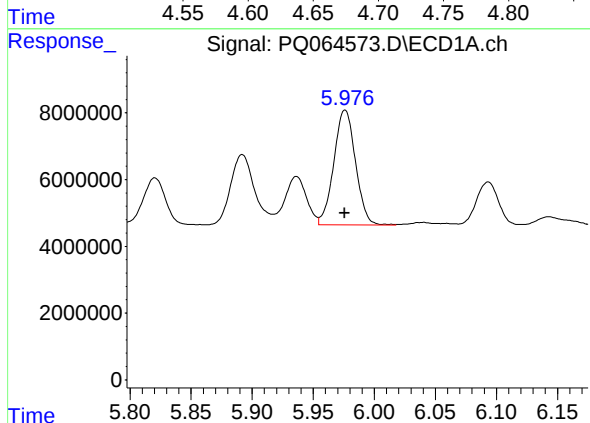
R.T.: 5.617 min
Delta R.T.: -0.002 min
Response: 74975466
Conc: 321.08 ng/ml

Instrument :
ECD_Q
ClientSampleId :



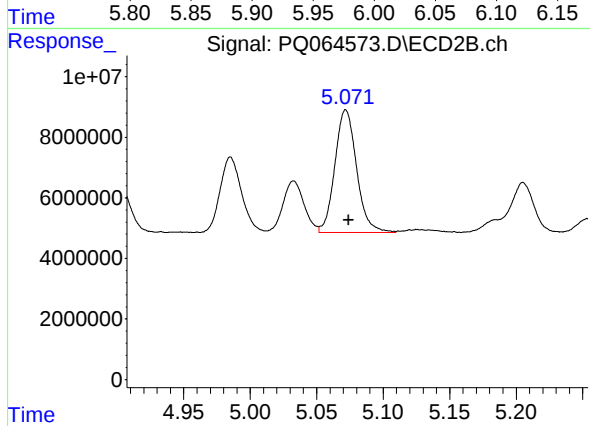
#27 AR-1254-2

R.T.: 4.688 min
Delta R.T.: -0.003 min
Response: 29821487
Conc: 161.21 ng/ml



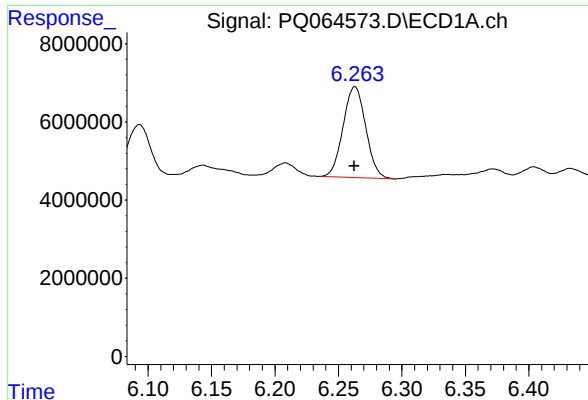
#28 AR-1254-3

R.T.: 5.976 min
Delta R.T.: 0.000 min
Response: 42585873
Conc: 173.26 ng/ml



#28 AR-1254-3

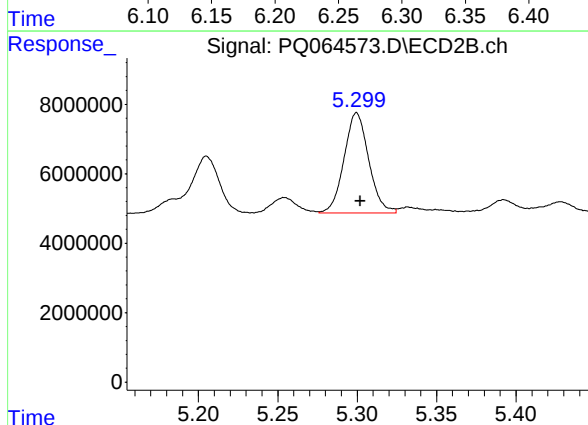
R.T.: 5.072 min
Delta R.T.: -0.002 min
Response: 46067420
Conc: 162.83 ng/ml



#29 AR-1254-4

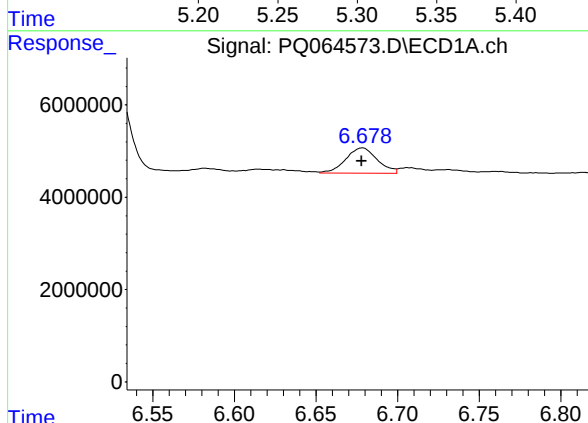
R.T.: 6.263 min
Delta R.T.: 0.000 min
Response: 28869367
Conc: 166.15 ng/ml

Instrument :
ECD_Q
ClientSampleId :



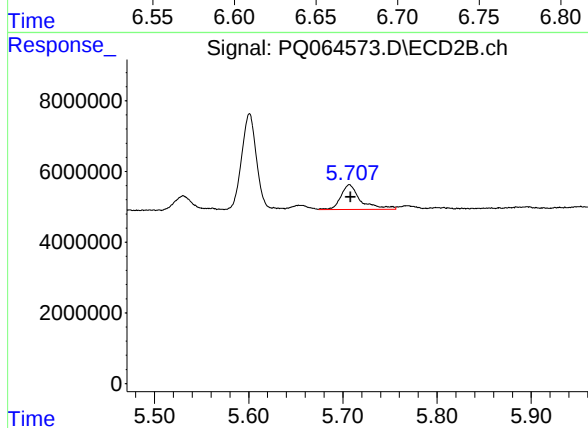
#29 AR-1254-4

R.T.: 5.300 min
Delta R.T.: -0.002 min
Response: 31167455
Conc: 167.89 ng/ml



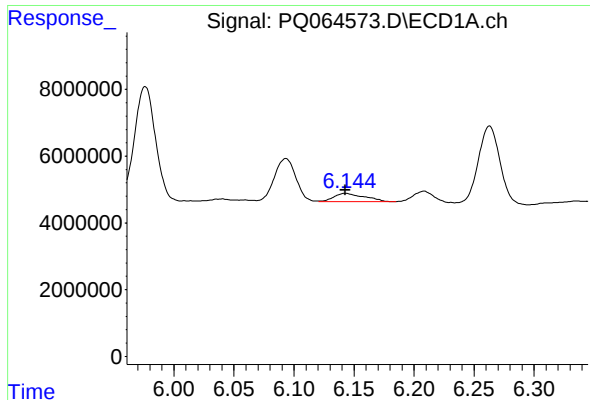
#30 AR-1254-5

R.T.: 6.678 min
Delta R.T.: 0.000 min
Response: 7374818
Conc: 38.21 ng/ml



#30 AR-1254-5

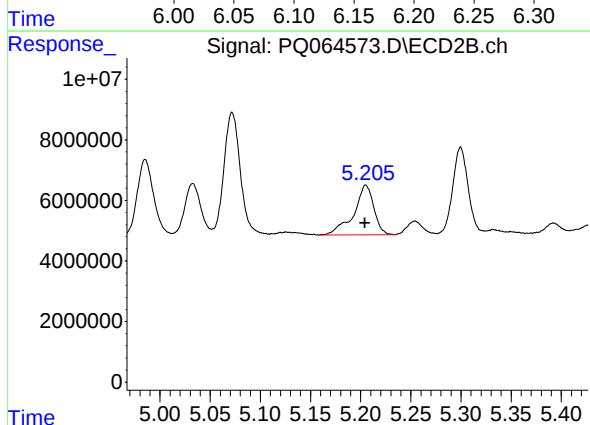
R.T.: 5.707 min
Delta R.T.: -0.001 min
Response: 10227628
Conc: 39.39 ng/ml



#31 AR-1260-1

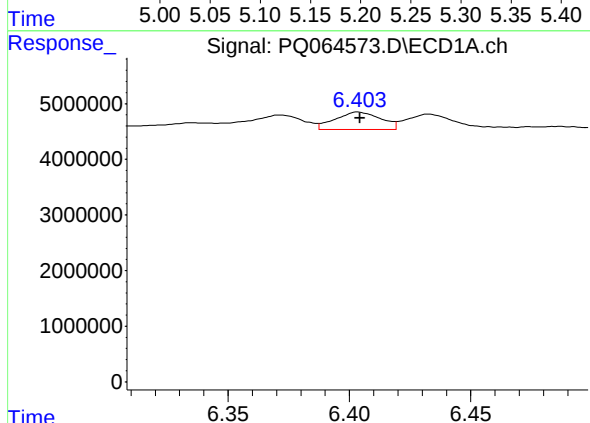
R.T.: 6.143 min
Delta R.T.: 0.000 min
Response: 4411471
Conc: 23.56 ng/ml

Instrument :
ECD_Q
ClientSampleId :



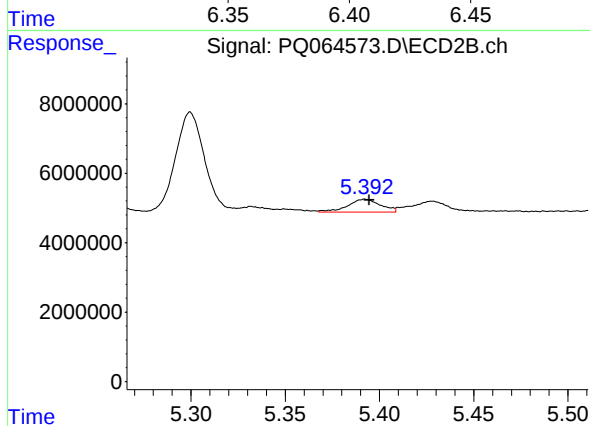
#31 AR-1260-1

R.T.: 5.205 min
Delta R.T.: 0.001 min
Response: 22962742
Conc: 118.74 ng/ml



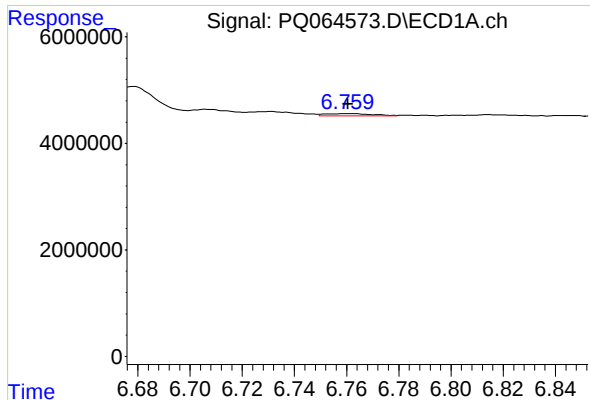
#32 AR-1260-2

R.T.: 6.404 min
Delta R.T.: 0.000 min
Response: 4111830
Conc: 18.97 ng/ml



#32 AR-1260-2

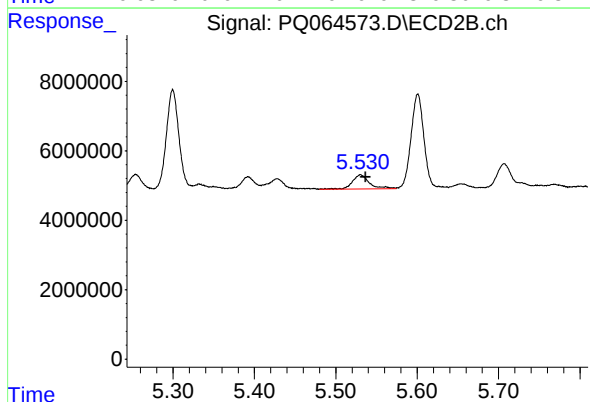
R.T.: 5.392 min
Delta R.T.: -0.002 min
Response: 4454970
Conc: 19.14 ng/ml



#33 AR-1260-3

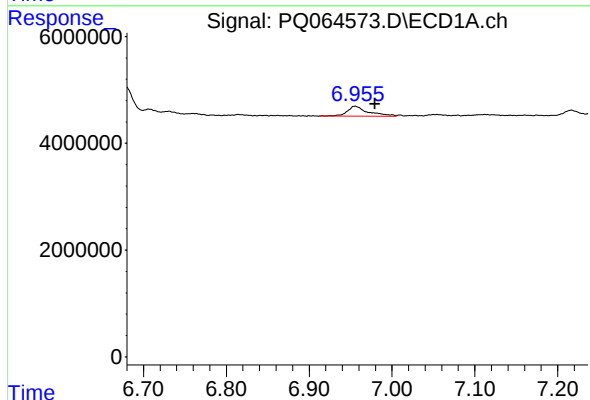
R.T.: 6.760 min
Delta R.T.: 0.000 min
Response: 517117
Conc: 3.17 ng/ml

Instrument :
ECD_Q
ClientSampleId :



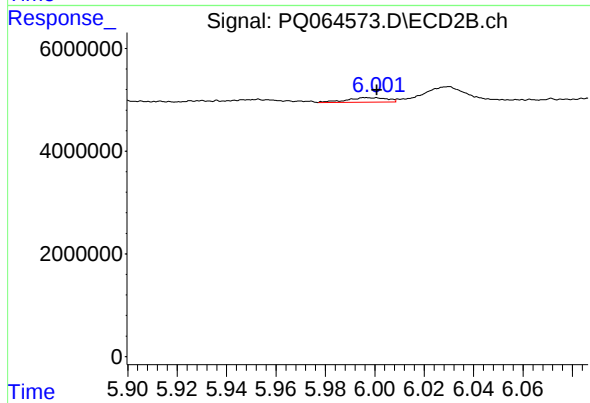
#33 AR-1260-3

R.T.: 5.530 min
Delta R.T.: -0.006 min
Response: 6006579
Conc: 27.63 ng/ml



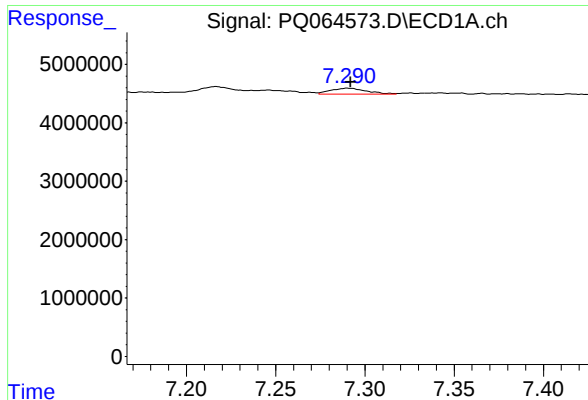
#34 AR-1260-4

R.T.: 6.956 min
Delta R.T.: -0.024 min
Response: 3372769
Conc: 19.66 ng/ml



#34 AR-1260-4

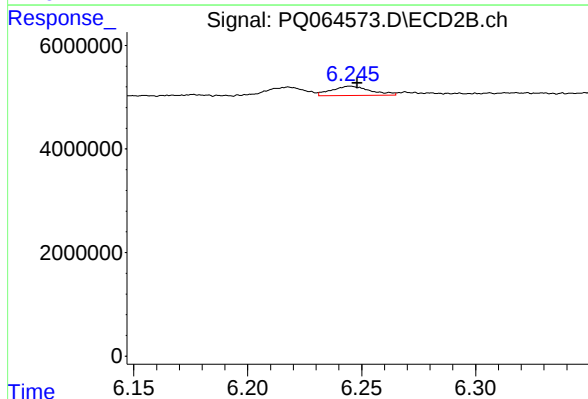
R.T.: 5.997 min
Delta R.T.: -0.004 min
Response: 979948
Conc: 5.32 ng/ml



#35 AR-1260-5

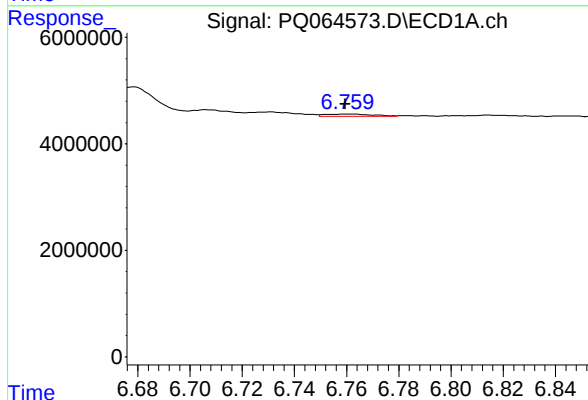
R.T.: 7.291 min
Delta R.T.: -0.001 min
Response: 1371816
Conc: 4.06 ng/ml

Instrument :
ECD_Q
ClientSampleId :



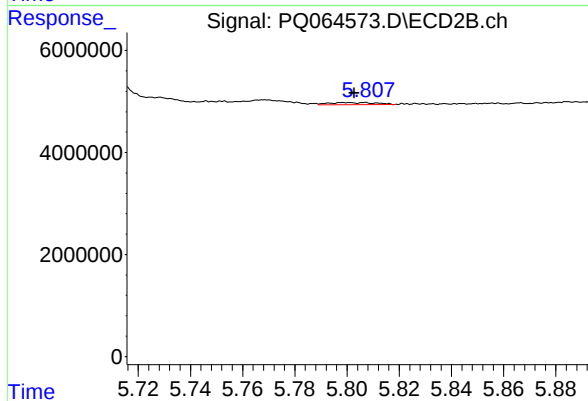
#35 AR-1260-5

R.T.: 6.245 min
Delta R.T.: -0.003 min
Response: 2092878
Conc: 4.83 ng/ml



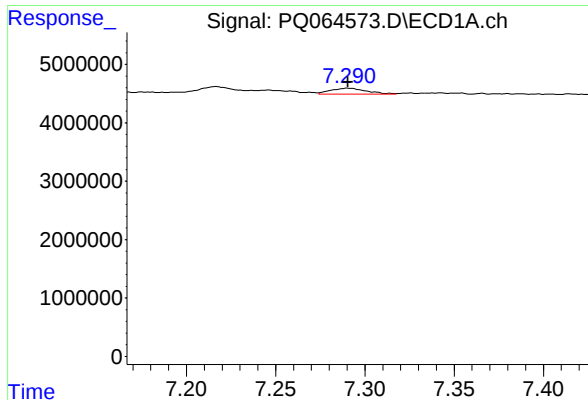
#36 AR-1262-1

R.T.: 6.760 min
Delta R.T.: 0.000 min
Response: 517117
Conc: 2.10 ng/ml



#36 AR-1262-1

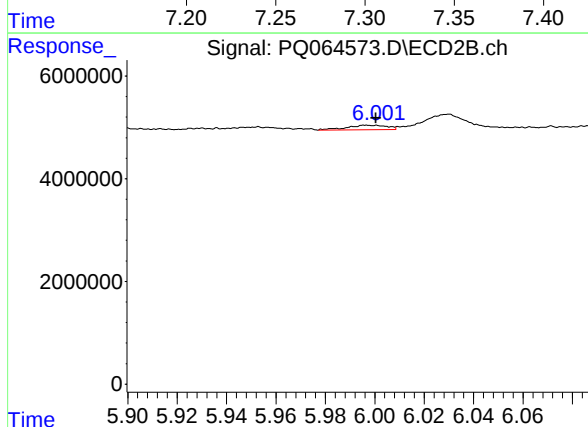
R.T.: 5.800 min
Delta R.T.: -0.003 min
Response: 485832
Conc: 4.27 ng/ml



#37 AR-1262-2

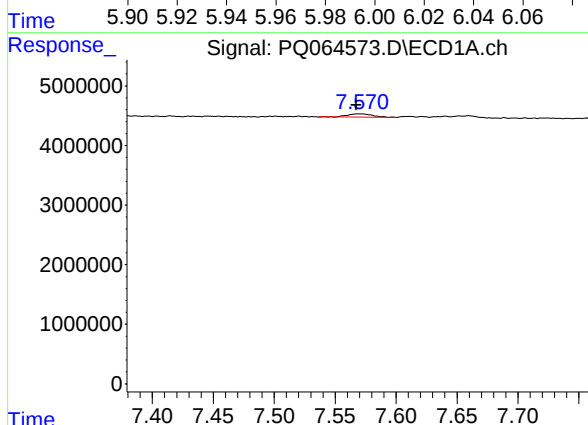
R.T.: 7.291 min
Delta R.T.: 0.000 min
Response: 1371816
Conc: 3.42 ng/ml

Instrument :
ECD_Q
ClientSampleId :



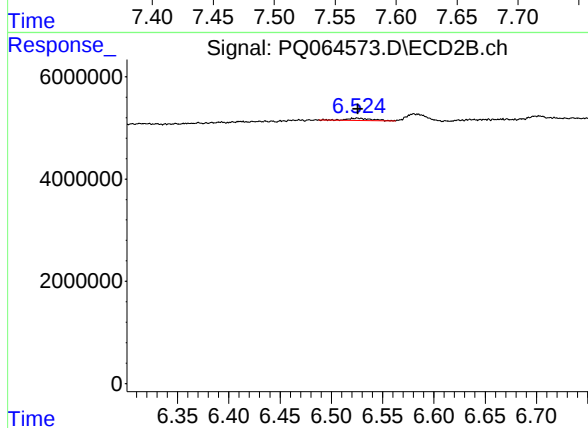
#37 AR-1262-2

R.T.: 5.997 min
Delta R.T.: -0.004 min
Response: 979948
Conc: 3.85 ng/ml



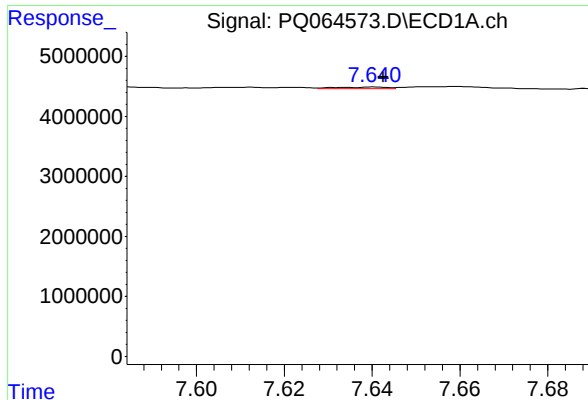
#38 AR-1262-3

R.T.: 7.571 min
Delta R.T.: 0.003 min
Response: 817735
Conc: 3.02 ng/ml



#38 AR-1262-3

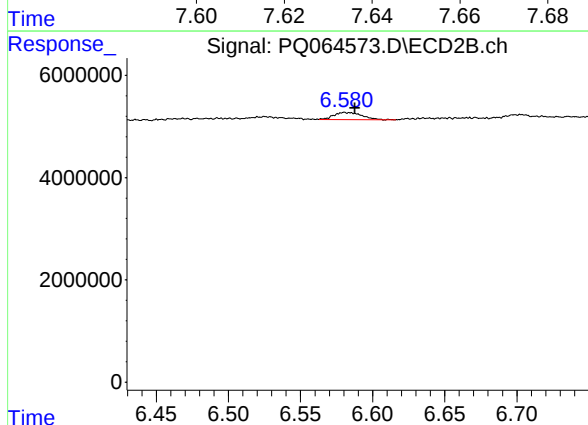
R.T.: 6.525 min
Delta R.T.: 0.000 min
Response: 678101
Conc: 3.01 ng/ml



#39 AR-1262-4

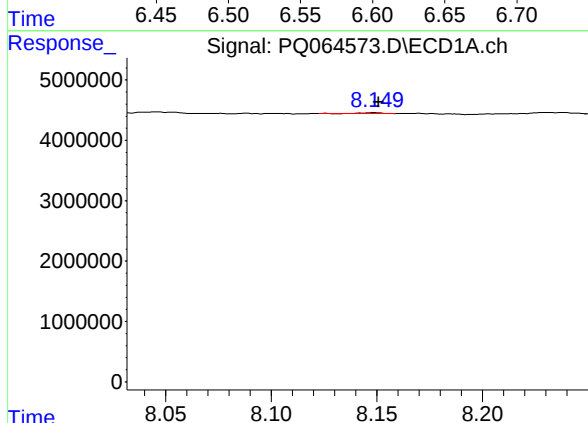
R.T.: 7.641 min
Delta R.T.: -0.002 min
Response: 217734
Conc: 1.03 ng/ml

Instrument :
ECD_Q
ClientSampleId :



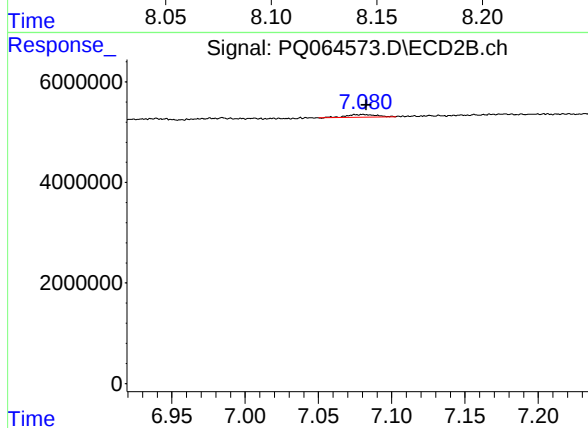
#39 AR-1262-4

R.T.: 6.581 min
Delta R.T.: -0.007 min
Response: 1847856
Conc: 4.27 ng/ml



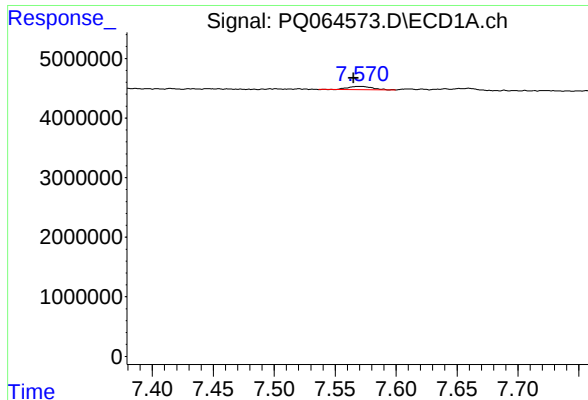
#40 AR-1262-5

R.T.: 8.149 min
Delta R.T.: -0.002 min
Response: 104690
Conc: 0.77 ng/ml



#40 AR-1262-5

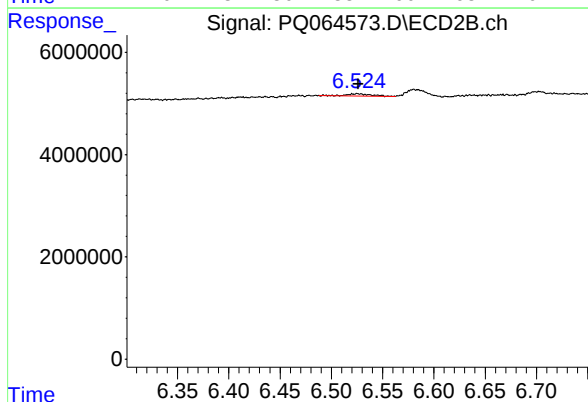
R.T.: 7.081 min
Delta R.T.: -0.002 min
Response: 760377
Conc: 2.90 ng/ml



#41 AR-1268-1

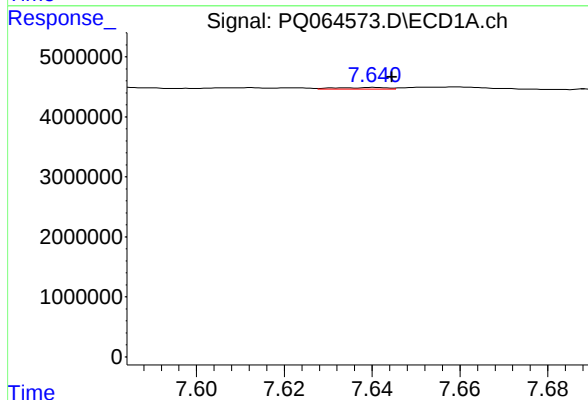
R.T.: 7.571 min
Delta R.T.: 0.005 min
Response: 817735
Conc: 1.71 ng/ml

Instrument :
ECD_Q
ClientSampleId :



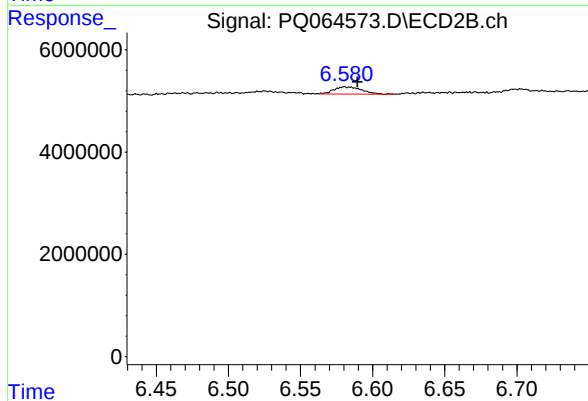
#41 AR-1268-1

R.T.: 6.525 min
Delta R.T.: -0.001 min
Response: 678101
Conc: 1.03 ng/ml



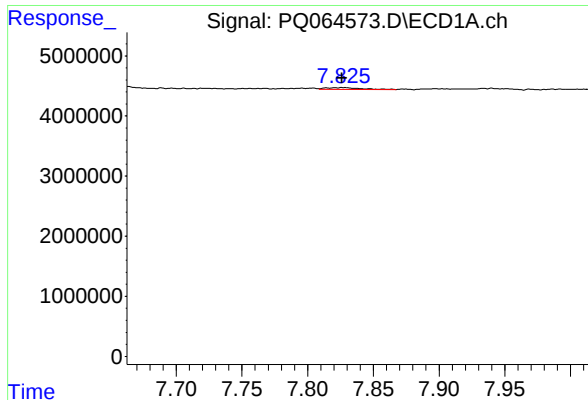
#42 AR-1268-2

R.T.: 7.641 min
Delta R.T.: -0.004 min
Response: 217734
Conc: 0.50 ng/ml



#42 AR-1268-2

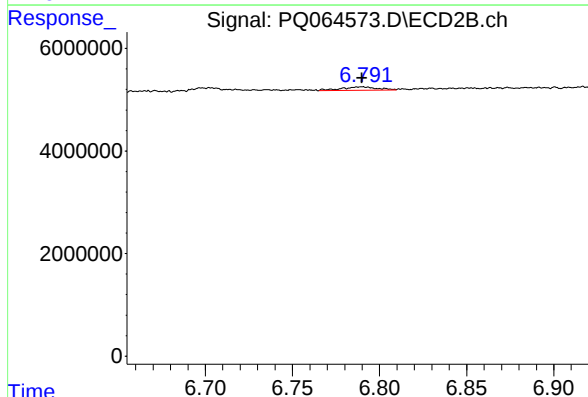
R.T.: 6.581 min
Delta R.T.: -0.009 min
Response: 1847856
Conc: 2.98 ng/ml



#43 AR-1268-3

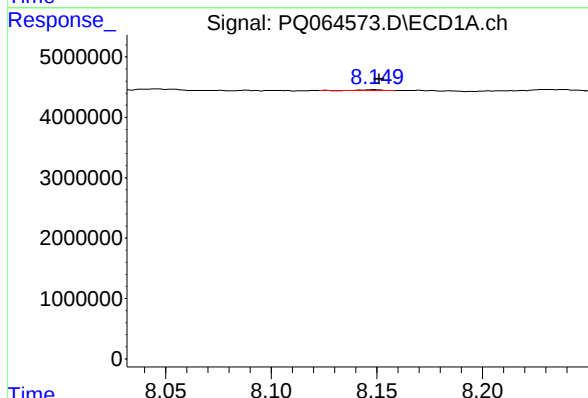
R.T.: 7.827 min
Delta R.T.: 0.000 min
Response: 573832
Conc: 1.52 ng/ml

Instrument :
ECD_Q
ClientSampleId :



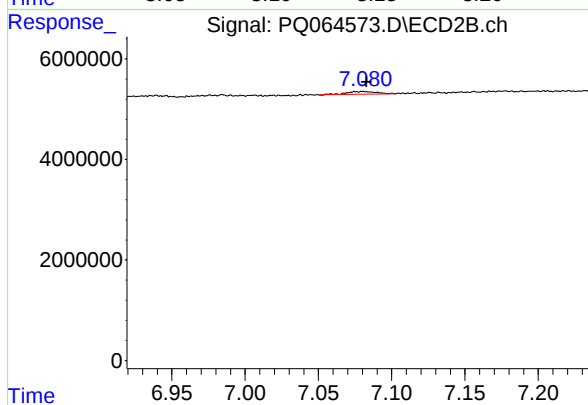
#43 AR-1268-3

R.T.: 6.790 min
Delta R.T.: 0.000 min
Response: 940454
Conc: 1.47 ng/ml



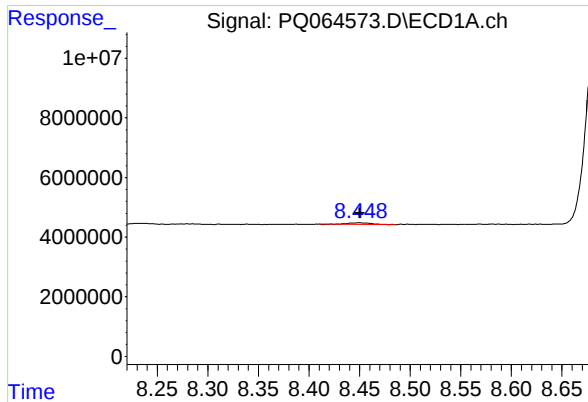
#44 AR-1268-4

R.T.: 8.149 min
Delta R.T.: -0.002 min
Response: 104690
Conc: 0.68 ng/ml



#44 AR-1268-4

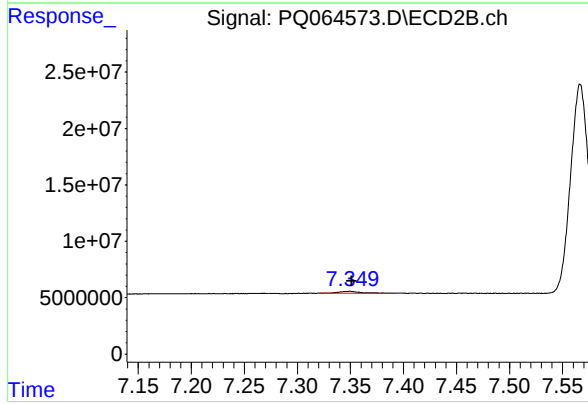
R.T.: 7.081 min
Delta R.T.: -0.002 min
Response: 760377
Conc: 2.53 ng/ml



#45 AR-1268-5

R.T.: 8.450 min
Delta R.T.: 0.000 min
Response: 816129
Conc: 0.75 ng/ml

Instrument :
ECD_Q
ClientSampleId :



#45 AR-1268-5

R.T.: 7.349 min
Delta R.T.: -0.002 min
Response: 2613626
Conc: 1.38 ng/ml