

Dissolution Method Validation

Product name :	Ramithiazide Tablets
Lable claim :	Ramipril 10 mg & Hydrochlorothiazide 25 mg
B. No. :	GP170403
Test :	Robustness- Change in RPM(Low)

Analysis Date:	14-Jun-17
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Name of standard	Standard purity(%)	Standard wt (mg)	Dilution details	Conc (ppm)
Ramipril	99.80	25.35	250 mL; 3 mL ->25 mL	12.2
Hydrochlorothiazide	99.90	30.42	250 mL; 6 mL ->25 mL	29.2

Injection No.	Hydrochlorothiazide		Ramipril	
	Retention Time	Area of Standard	Retention Time	Area of Standard
1	2.140	16285.879	4.187	4183.487
2	2.140	16299.245	4.183	4185.664
3	2.140	16347.103	4.187	4194.163
4	2.140	16268.386	4.187	4178.958
5	2.140	16296.853	4.187	4204.167
Average	2.140	16299.493	4.186	4189.288
SD	0.000	29.27	0.002	9.98
%RSD	0.00	0.18	0.04	0.24

System suitability results		
% RSD of Ramipril	0.24	NMT 2.0%
% RSD of HCTZ	0.18	NMT 2.0%

Test Solution :	1 Tablet	mg	750.0	mL with Dissolution Media
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Sample No.	Sample Weight (mg)	Area of Sample		% Assay	
		Hydrochlorothiazide	Ramipril	Hydrochlorothiazide	Ramipril
1	198.96	18413.175	4813.921	98.9	104.7
2	198.44	18595.457	4631.593	99.9	100.7
3	199.22	18441.409	4544.277	99.0	98.8
4	198.46	19166.315	4473.982	102.9	97.3
5	198.50	18426.480	4477.030	98.9	97.3
6	196.62	18872.836	4530.993	101.3	98.5
			Average	100.2	99.5
			SD	1.6	2.8
			%RSD	1.6	2.8

Done by:
Date:

[Signature]
20-Jun-17

Checked by:
Date:

[Signature]
20-Jun-17

Dissolution Method Validation

Product name :	Ramithiazide Tablets
Lable claim :	Ramipril 10 mg & Hydrochlorothiazide 25 mg
B. No. :	GP170403
Test :	Robustness- Change in medium volume (Low)

Analysis Date:	14-Jun-17
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Name of standard	Standard purity(%)	Standard wt (mg)	Dilution details	Conc (ppm)
Ramipril	99.80	25.35	250 mL; 3 mL ->25 mL	12.2
Hydrochlorothiazide	99.90	30.42	250 mL; 6 mL ->25 mL	29.2

Injection No.	Hydrochlorothiazide		Ramipril	
	Retention Time	Area of Standard	Retention Time	Area of Standard
1	2.140	16285.879	4.187	4183.487
2	2.140	16299.245	4.183	4185.664
3	2.140	16347.103	4.187	4194.163
4	2.140	16268.386	4.187	4178.958
5	2.140	16296.853	4.187	4204.167
Average	2.140	16299.493	4.187	4189.288
SD	0.000	29.27	0.002	9.98
%RSD	0.00	0.18	0.04	0.24

System suitability results		
% RSD of Ramipril	0.24	NMT 2.0%
% RSD of HCTZ	0.18	NMT 2.0%

Test Solution :	1 Tablet	mg	750.0	mL with Dissolution Media
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Sample No.	Sample Weight (mg)	Area of Sample		% Assay	
		Hydrochlorothiazide	Ramipril	Hydrochlorothiazide	Ramipril
1	201.07	18672.417	4373.165	100.3	95.1
2	187.60	19145.038	4580.608	102.8	99.6
3	200.63	18848.707	4428.172	101.2	96.3
4	198.11	19307.016	4653.372	103.7	101.2
5	198.05	18249.211	4375.991	98.0	95.1
6	192.33	18452.504	4434.577	99.1	96.4
		Average		100.8	97.3
		SD		2.2	2.5
		%RSD		2.2	2.6

Done by: 
Date: 20-Jun-17

Checked by: 
Date: 20-Jun-17

Dissolution Method Validation

Product name :	Ramithiazide Tablets
Lable claim :	Ramipril 10 mg & Hydrochlorothiazide 25 mg
B. No. :	GP170403
Test :	Robustness- Change in medium volume (High)

Analysis Date:	14-Jun-17
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Name of standard	Standard purity(%)	Standard wt (mg)	Dilution details	Conc (ppm)
Ramipril	99.80	25.35	250 mL; 3 mL ->25 mL	12.2
Hydrochlorothiazide	99.90	30.42	250 mL; 6 mL ->25 mL	29.2

Injection No.	Hydrochlorothiazide		Ramipril	
	Retention Time	Area of Standard	Retention Time	Area of Standard
1	2.140	16285.879	4.187	4183.487
2	2.140	16299.245	4.183	4185.664
3	2.140	16347.103	4.187	4194.163
4	2.140	16268.386	4.187	4178.958
5	2.140	16296.853	4.187	4204.167
Average	2.140	16299.493	4.186	4189.288
SD	0.000	29.27	0.002	9.98
%RSD	0.00	0.18	0.04	0.24

System suitability results		
% RSD of Ramipril	0.24	NMT 2.0%
% RSD of HCTZ	0.18	NMT 2.0%

Test Solution :	1 Tablet	mg	750.0	mL with Dissolution Media
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Sample No.	Sample Weight (mg)	Area of Sample		% Assay	
		Hydrochlorothiazide	Ramipril	Hydrochlorothiazide	Ramipril
1	198.11	18572.085	4535.678	99.7	98.6
2	201.21	18272.022	4432.642	98.1	96.4
3	201.19	18274.390	4368.276	98.1	95.0
4	196.71	18446.851	4471.988	99.1	97.2
5	195.38	18148.728	4427.913	97.5	96.3
6	196.48	18407.878	4446.813	98.8	96.7
		Average		98.6	96.7
		SD		0.8	1.2
		%RSD		0.8	1.2

Done by:
Date:

[Signature]
20-Jun-17

Checked by:
Date:

[Signature]
20-Jun-17

Dissolution Method Validation

Product name :	Ramithiazide Tablets
Lable claim :	Ramipril 10 mg & Hydrochlorothiazide 25 mg
B. No. :	GP170403
Test :	Robustness- Change in RPM(High)

Analysis Date:	14-Jun-17
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Name of standard	Standard purity(%)	Standard wt (mg)	Dilution details	Conc (ppm)
Ramipril	99.80	25.35	250 mL; 3 mL ->25 mL	12.2
Hydrochlorothiazide	99.90	30.42	250 mL; 6 mL ->25 mL	29.2

Injection No.	Hydrochlorothiazide		Ramipril	
	Retention Time	Area of Standard	Retention Time	Area of Standard
1	2.140	16285.879	4.187	4183.487
2	2.140	16299.245	4.183	4185.664
3	2.140	16347.103	4.187	4194.163
4	2.140	16268.386	4.187	4178.958
5	2.140	16296.853	4.187	4204.167
Average	2.140	16299.493	4.186	4189.288
SD	0.000	29.27	0.002	9.98
%RSD	0.00	0.18	0.04	0.24

System suitability results		
% RSD of Ramipril	0.24	NMT 2.0%
% RSD of HCTZ	0.18	NMT 2.0%

Test Solution :	1 Tablet	mg	750.0	mL with Dissolution Media
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Sample No.	Sample Weight (mg)	Area of Sample		% Assay	
		Hydrochlorothiazide	Ramipril	Hydrochlorothiazide	Ramipril
1	194.35	18735.899	4599.252	100.6	100.0
2	194.00	18700.891	4870.020	100.4	105.9
3	198.70	18569.325	4624.763	99.7	100.5
4	194.53	18438.851	4457.275	99.0	96.9
5	198.98	18524.978	4468.793	99.5	97.2
6	195.94	19002.493	4620.786	102.0	100.5
		Average		100.2	100.2
		SD		1.1	3.2
		%RSD		1.1	3.2

Done by: 
Date: 20-Jun-17

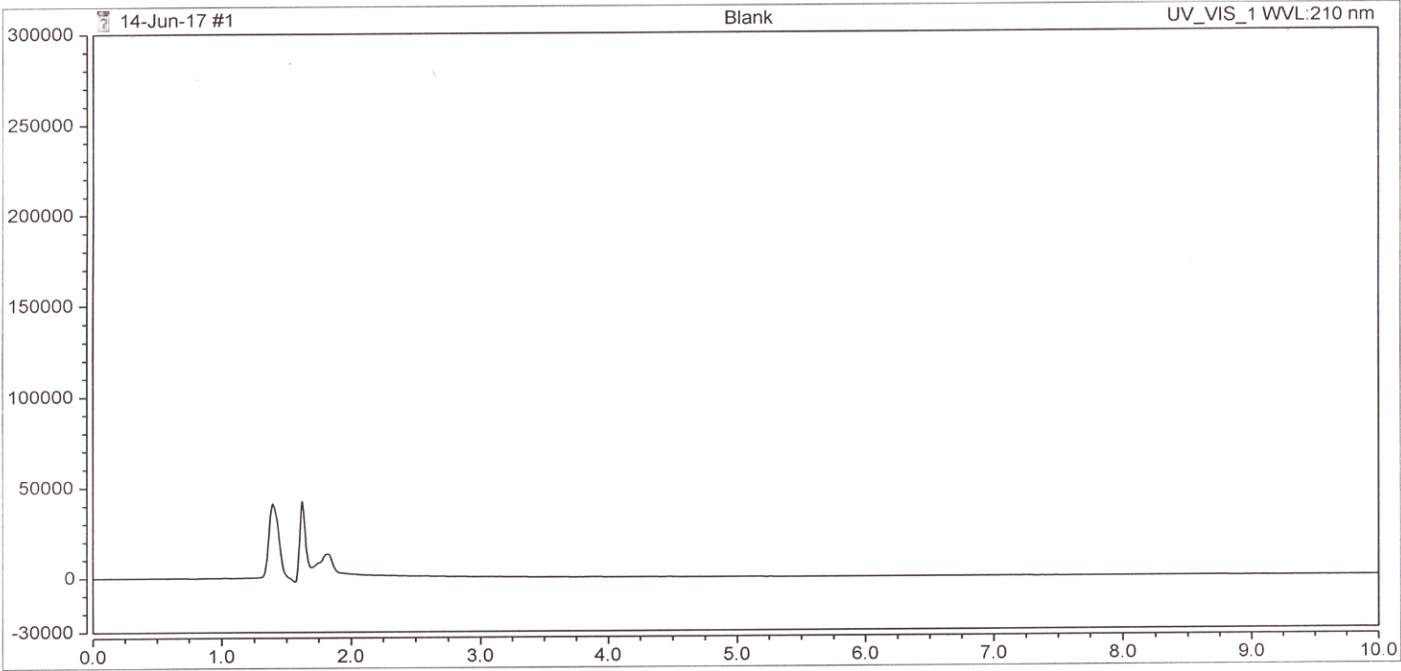
Checked by: 
Date: 20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Blank	Run Time (min):	10.00
Vial Number:	GA1	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	Ramithiazide Dissolution PR	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 16:32	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	µAU*min				%
Total:							

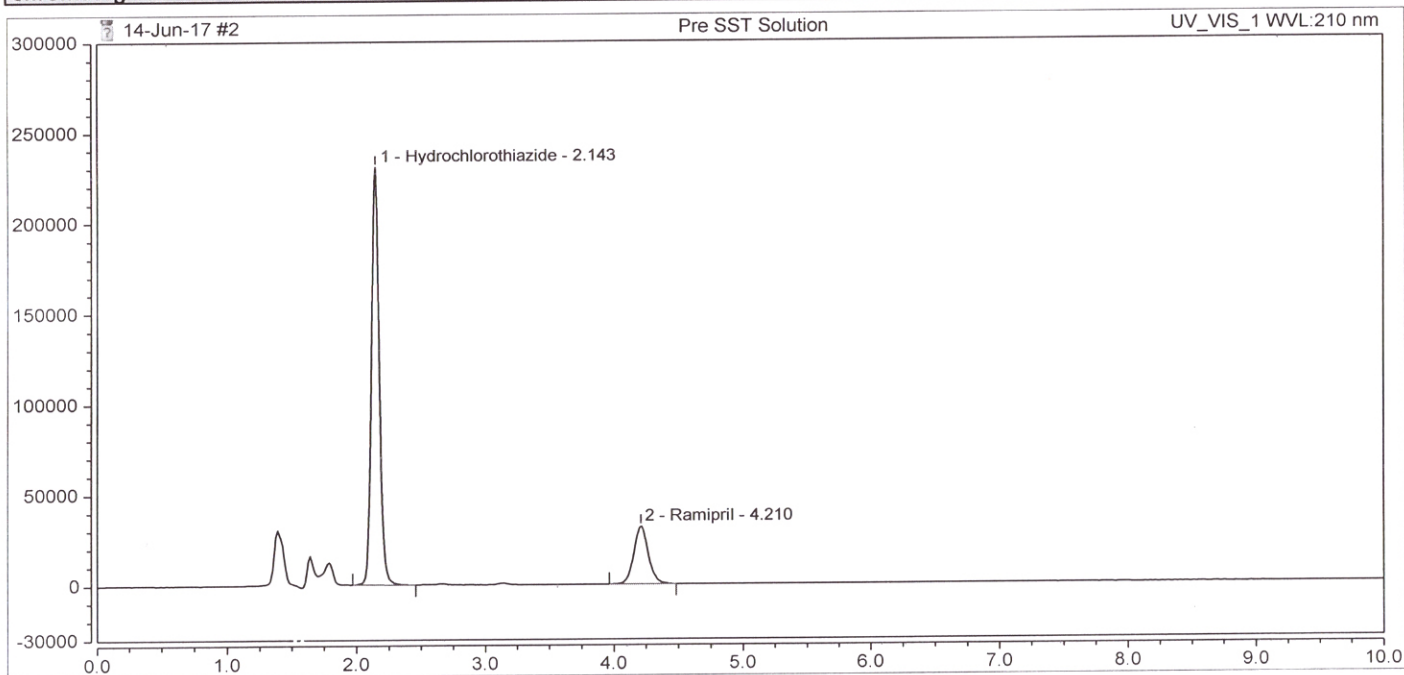
Pankaj Gurav
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Pre SST Solution	Run Time (min):	10.00
Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	Ramithiazide Dissolution PR	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 18:37	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram

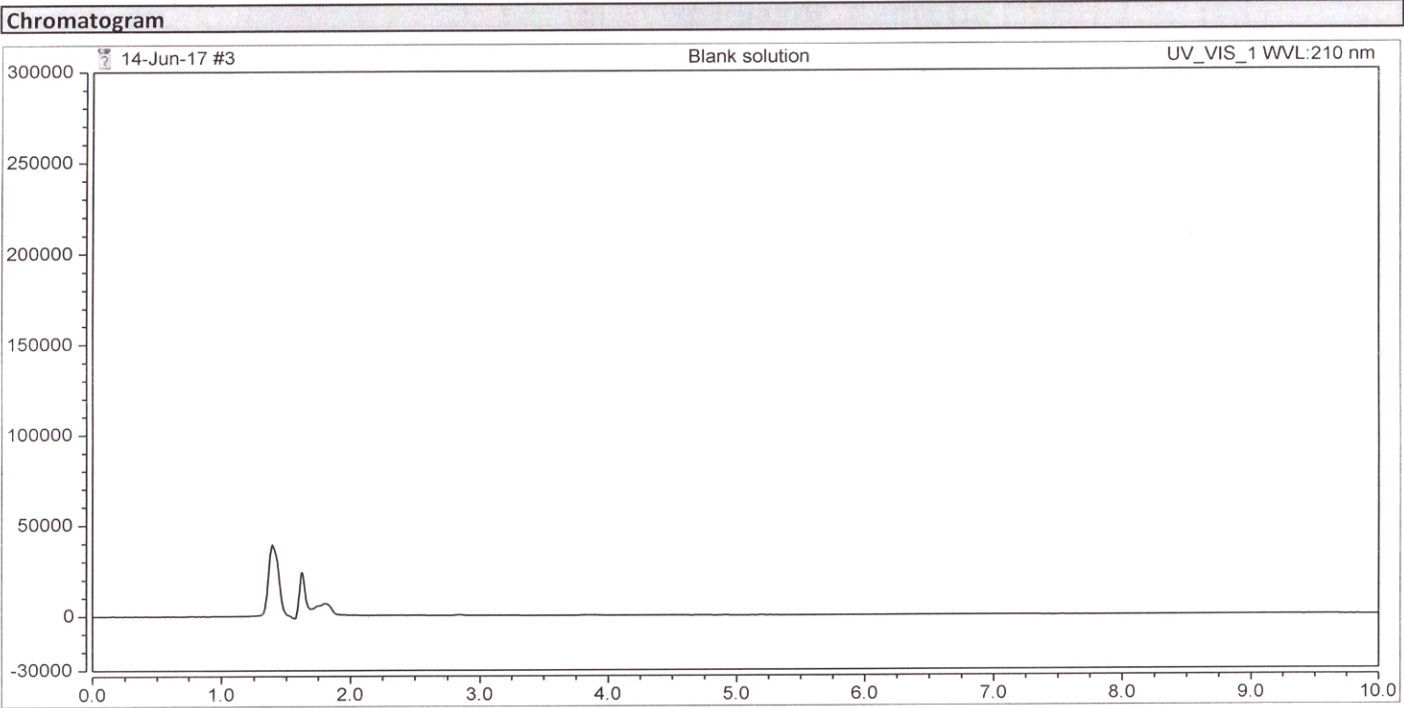


Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	$\mu\text{AU}\cdot\text{min}$				%
1	Hydrochlorothiazid	2.143	16245.079	1.13	6130	58.6	79.65
2	Ramipril	4.210	4149.756	1.06	6946	65.1	20.35
Total:							

Pankaj Gurav
20-Jun-17

Pankaj Gurav
20-Jun-17

QbD Research & Development Pvt.Ltd.					
Injection Details					
Injection Name:	Blank solution	Run Time (min):	10.00		
Vial Number:	GA1	Injection Volume:	10.00		
Injection Type:	Unknown	Channel:	UV_VIS_1		
Calibration Level:		Wavelength:	210		
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1		
Processing Method:	PR Method_1	Dilution Factor:	1.0000		
Injection Date/Time:	14-Jun-17 20:53	Sample Weight:	1.0000		
User Name:	Pankaj Gurav	Sample Weight:	1.0000		



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
Total:							

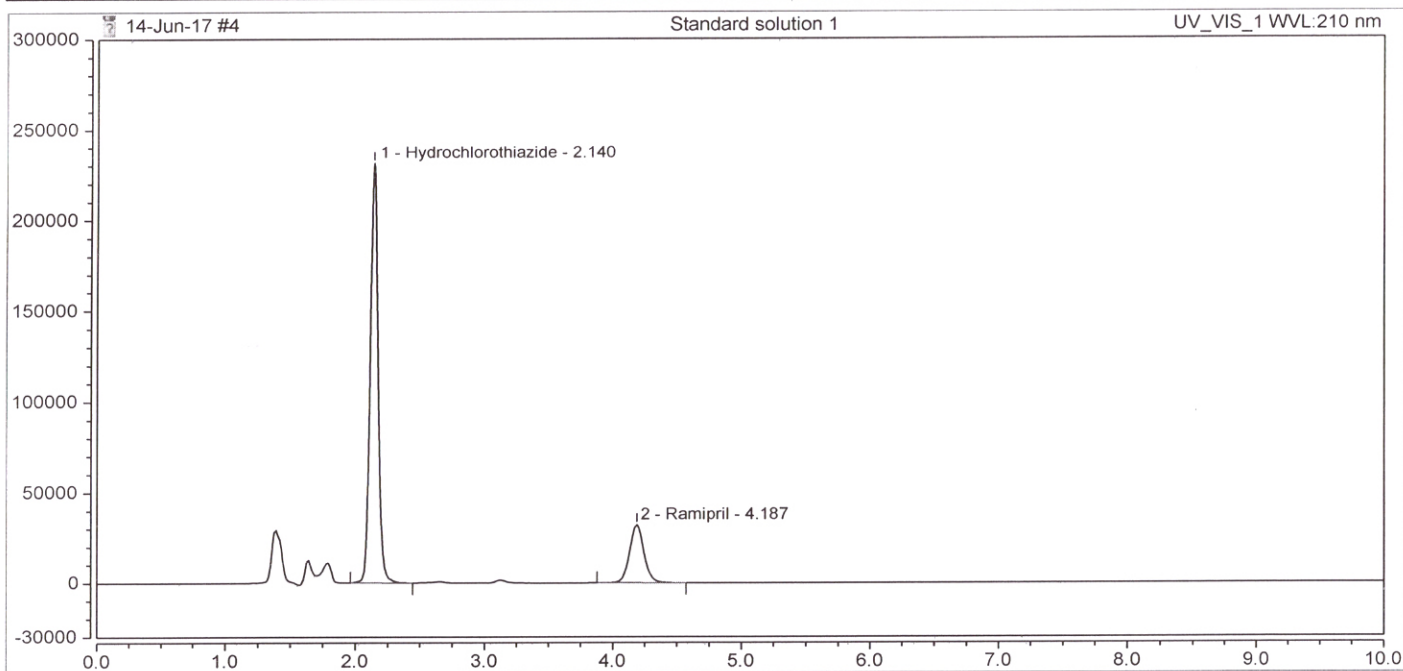
Pankaj Gurav
20-Jun-17

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Injection Details

Injection Name:	Standard solution 1	Run Time (min):	10.00
Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 21:04	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.140	16285.879	1.12	6160	64.5	79.56
2	Ramipril	4.187	4183.487	1.05	6984	36.8	20.44
Total:							

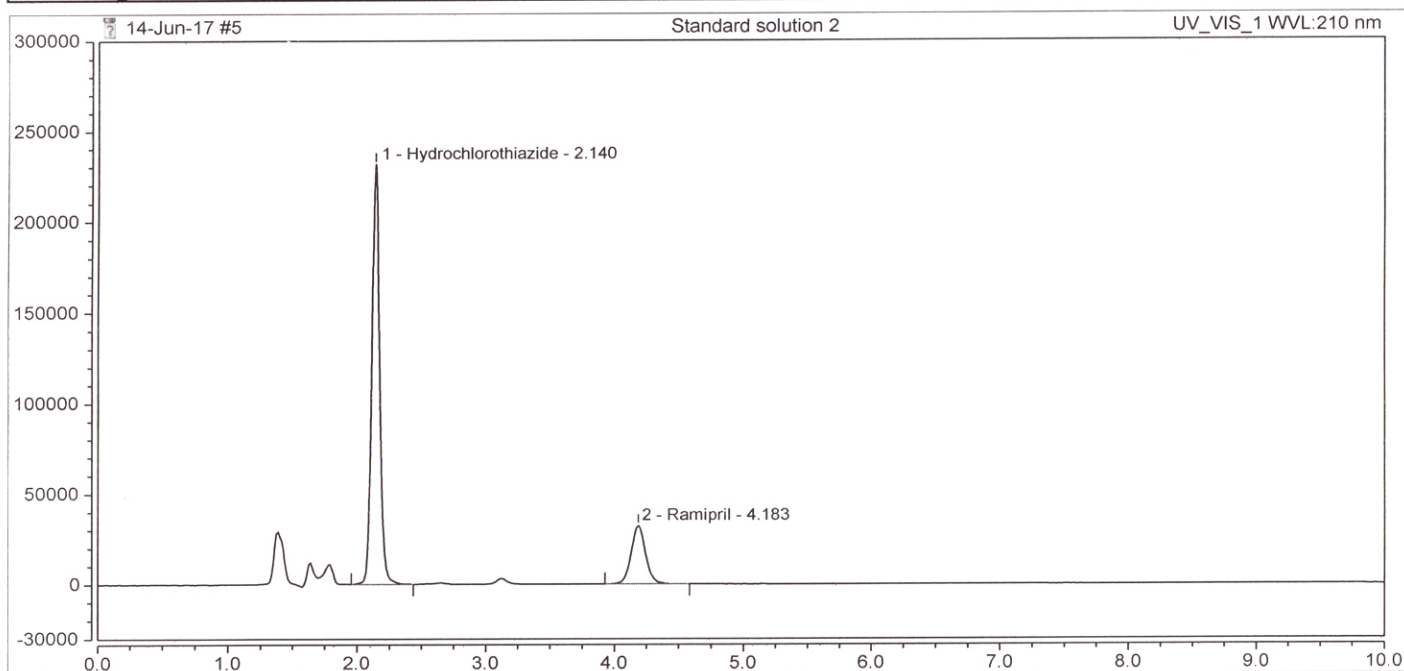
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20-Jun-17Pankaj
20-Jun-17

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Injection Details

Injection Name:	Standard solution 2	Run Time (min):	10.00
Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 21:16	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.140	16299.244	1.12	6167	67.3	79.57
2	Ramipril	4.183	4185.664	1.07	6958	19.1	20.43
Total:							

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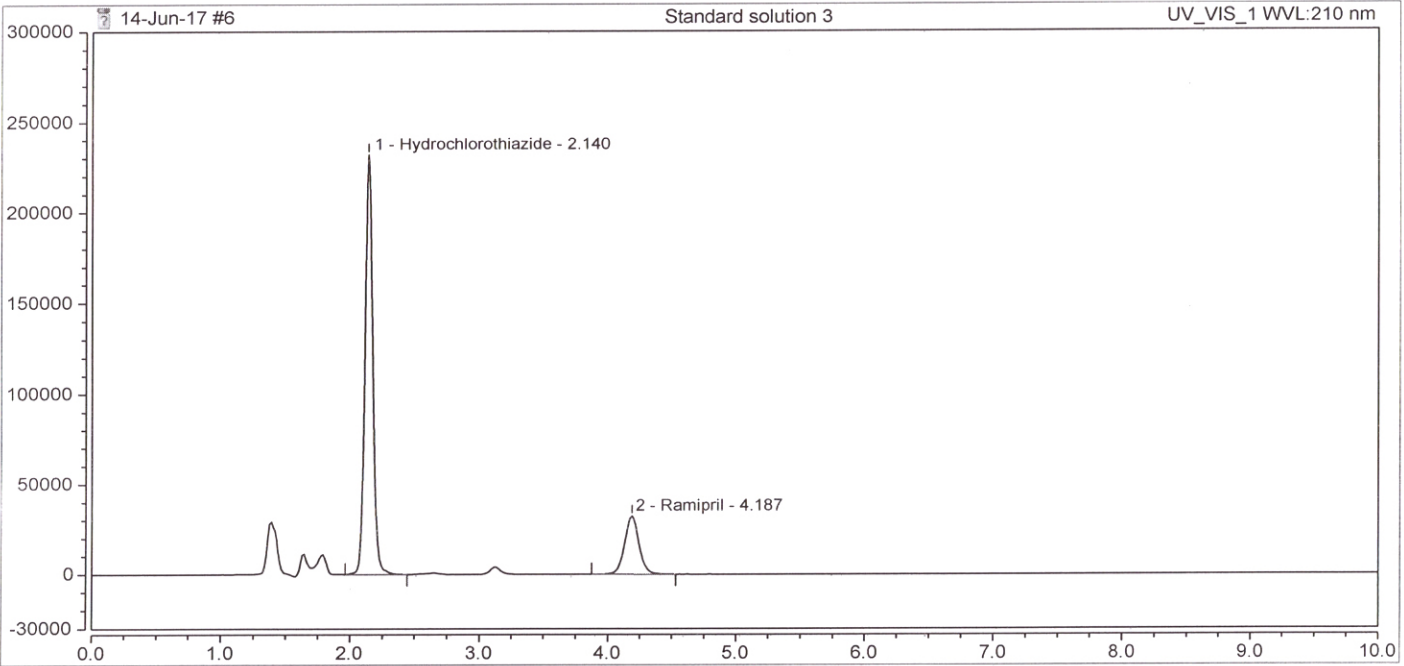
Pankaj Gurav
20-Jun-17

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Injection Details

Injection Name:	Standard solution 3	Run Time (min):	10.00
Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 21:28	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.140	16347.103	1.13	6177	66.7	79.58
2	Ramipril	4.187	4194.163	1.05	6985	15.2	20.42
Total:							

Pankaj Gurav
20-Jun-17

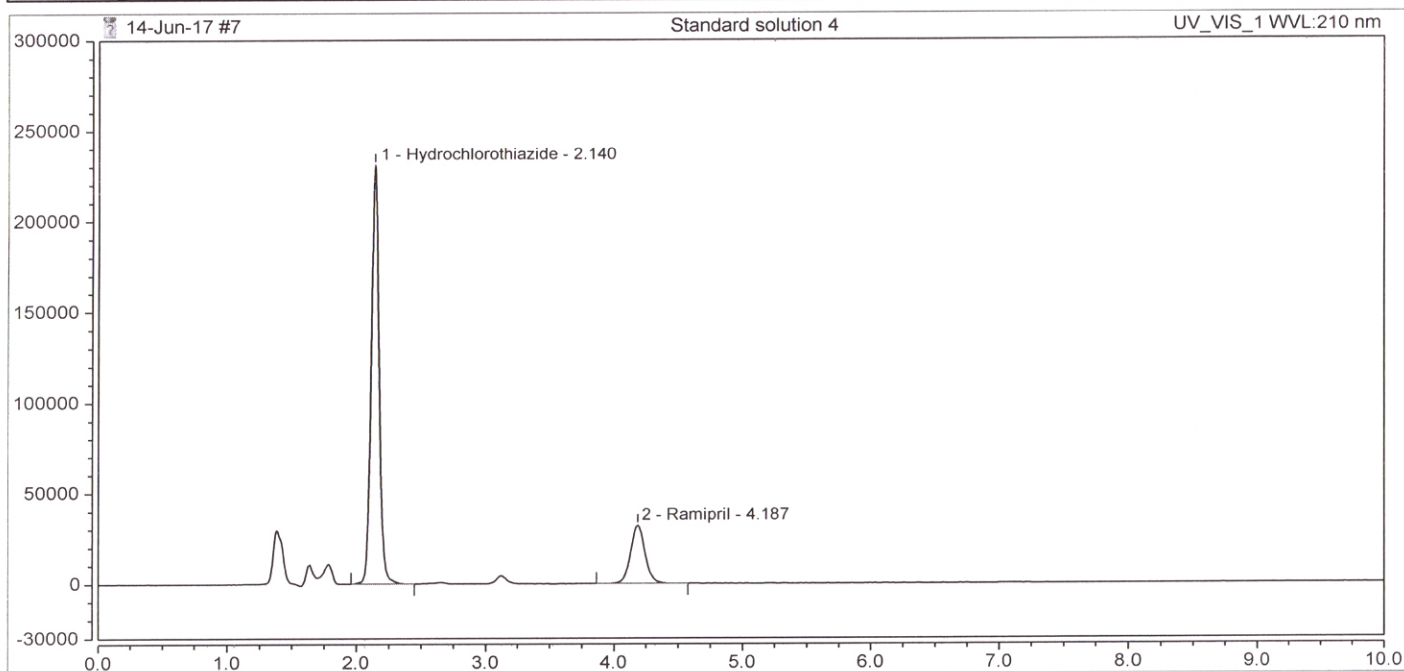
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20-Jun-17

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Injection Details

Injection Name:	Standard solution 4	Run Time (min):	10.00
Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 21:39	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.140	16268.386	1.13	6188	66.3	79.56
2	Ramipril	4.187	4178.958	1.05	7021	13.9	20.44
Total:							

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 20-Jun-17

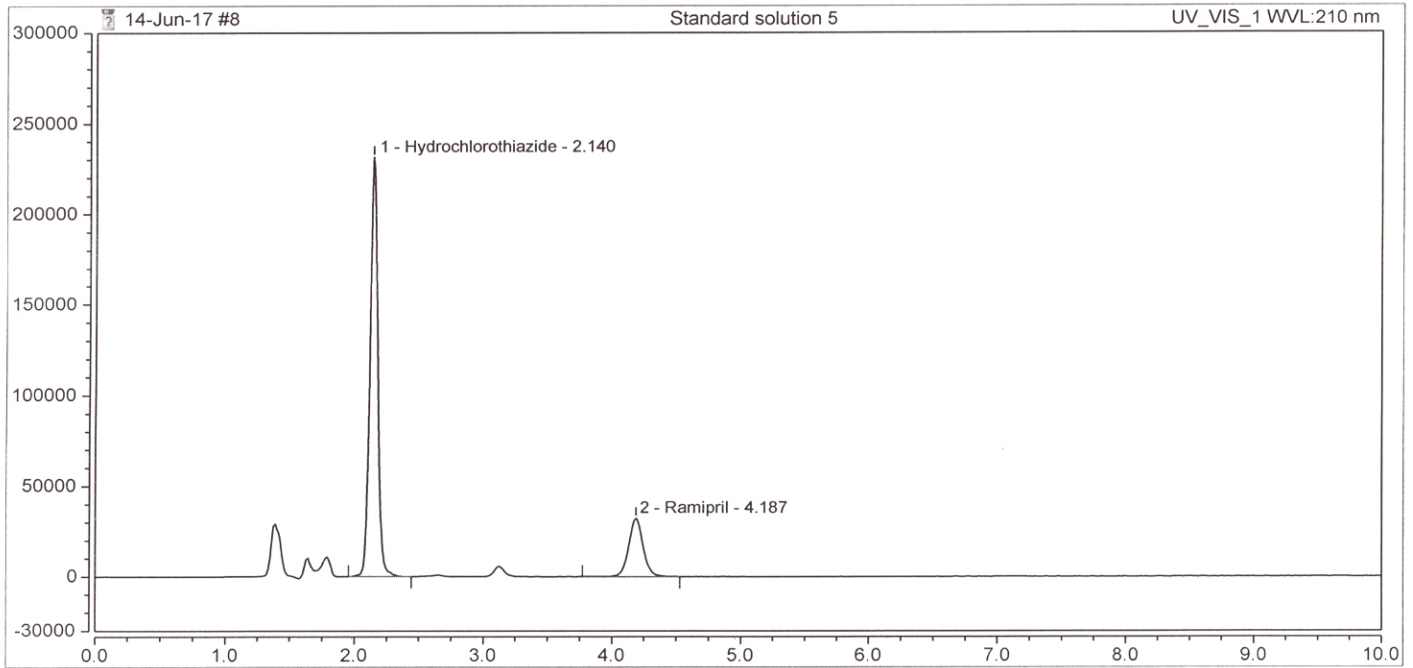
Pankaj Gurav
 20-Jun-17

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Injection Details

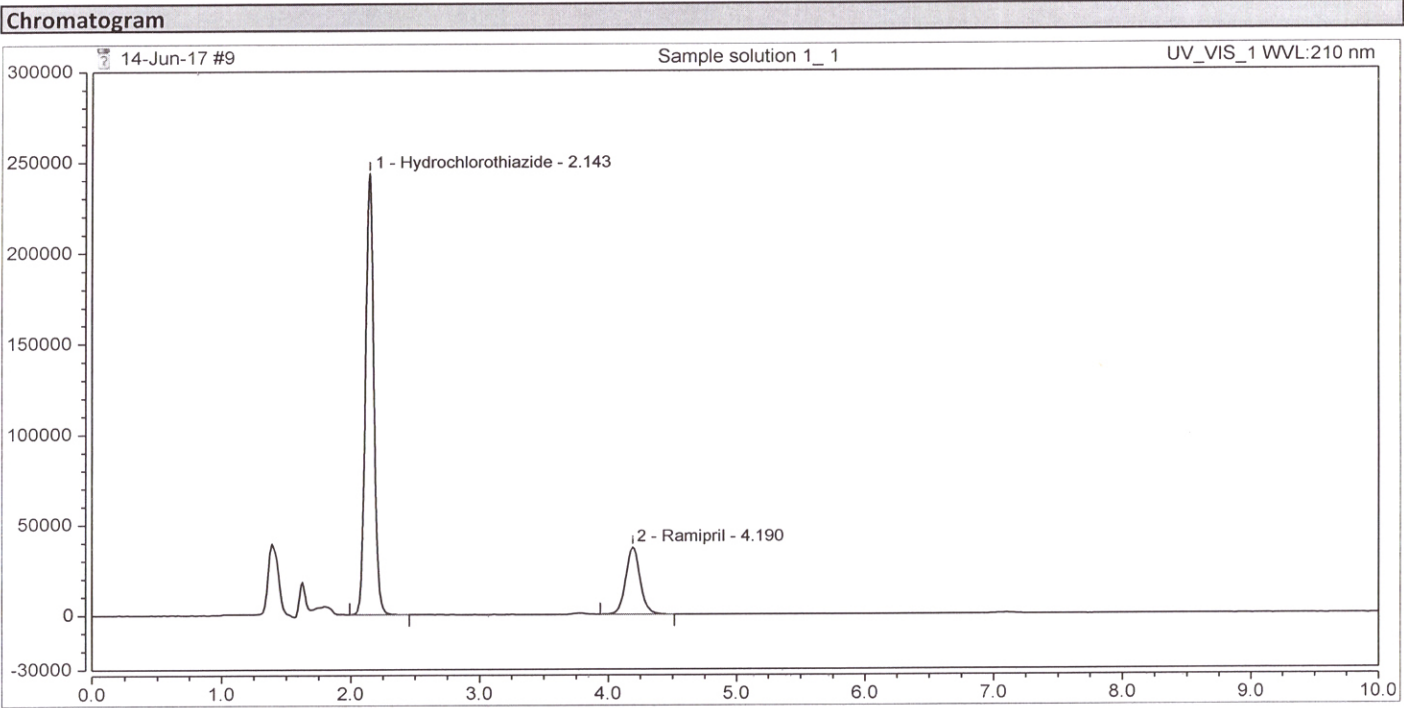
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Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 21:51	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.140	16296.853	1.13	6193	67.4	79.49
2	Ramipril	4.187	4204.167	1.05	6977	10.9	20.51
Total:							

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Injection Details					
Injection Name:	Sample solution 1_ 1	Run Time (min):	10.00		
Vial Number:	GA3	Injection Volume:	10.00		
Injection Type:	Unknown	Channel:	UV_VIS_1		
Calibration Level:		Wavelength:	210		
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1		
Processing Method:	PR Method_ 1	Dilution Factor:	1.0000		
Injection Date/Time:	14-Jun-17 22:03	Sample Weight:	1.0000		
User Name:	Pankaj Gurav	Sample Weight:	1.0000		



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18413.175	1.09	5226	194.1	79.27
2	Ramipril	4.190	4813.921	1.06	7024	99.8	20.73
Total:							

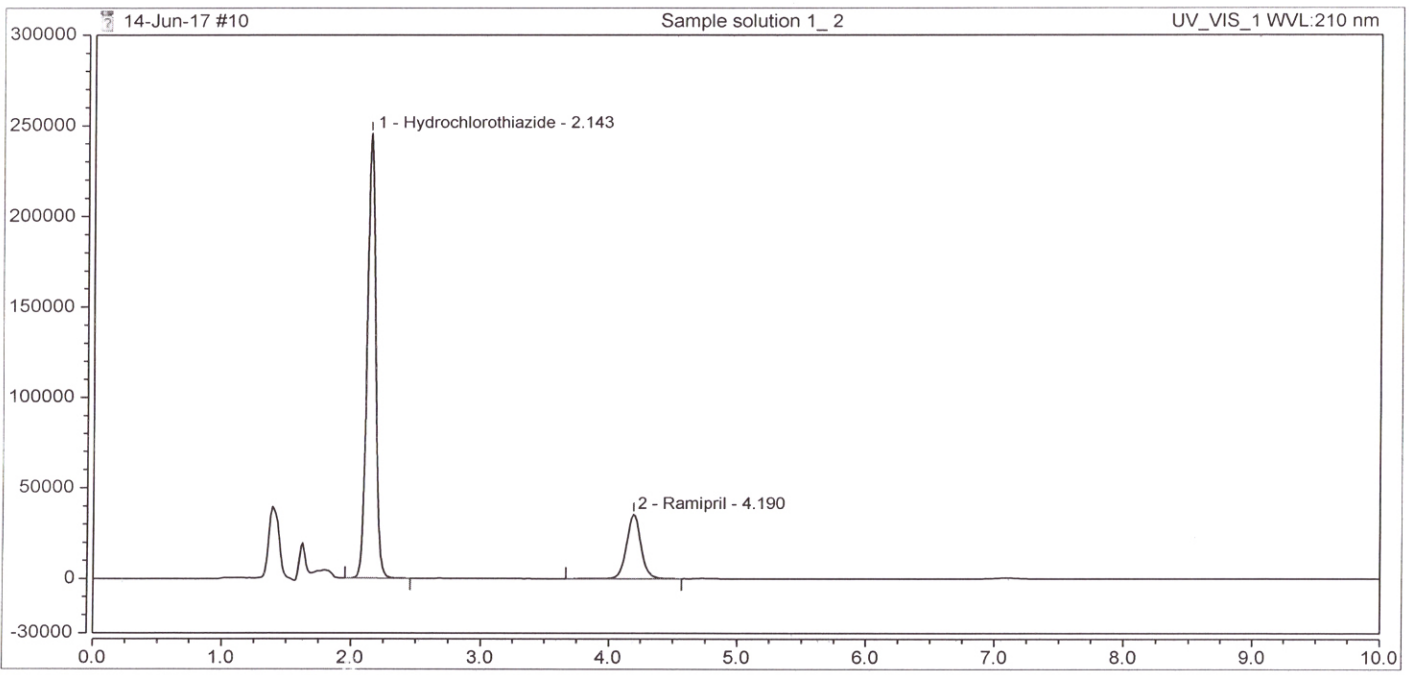
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20-Jun-17

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Injection Details			
Injection Name:	Sample solution 1_ 2	Run Time (min):	10.00
Vial Number:	GA4	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_ 1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 22:15	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18595.457	1.10	5198	217.3	80.06
2	Ramipril	4.190	4631.593	1.07	6999	284.3	19.94
Total:							

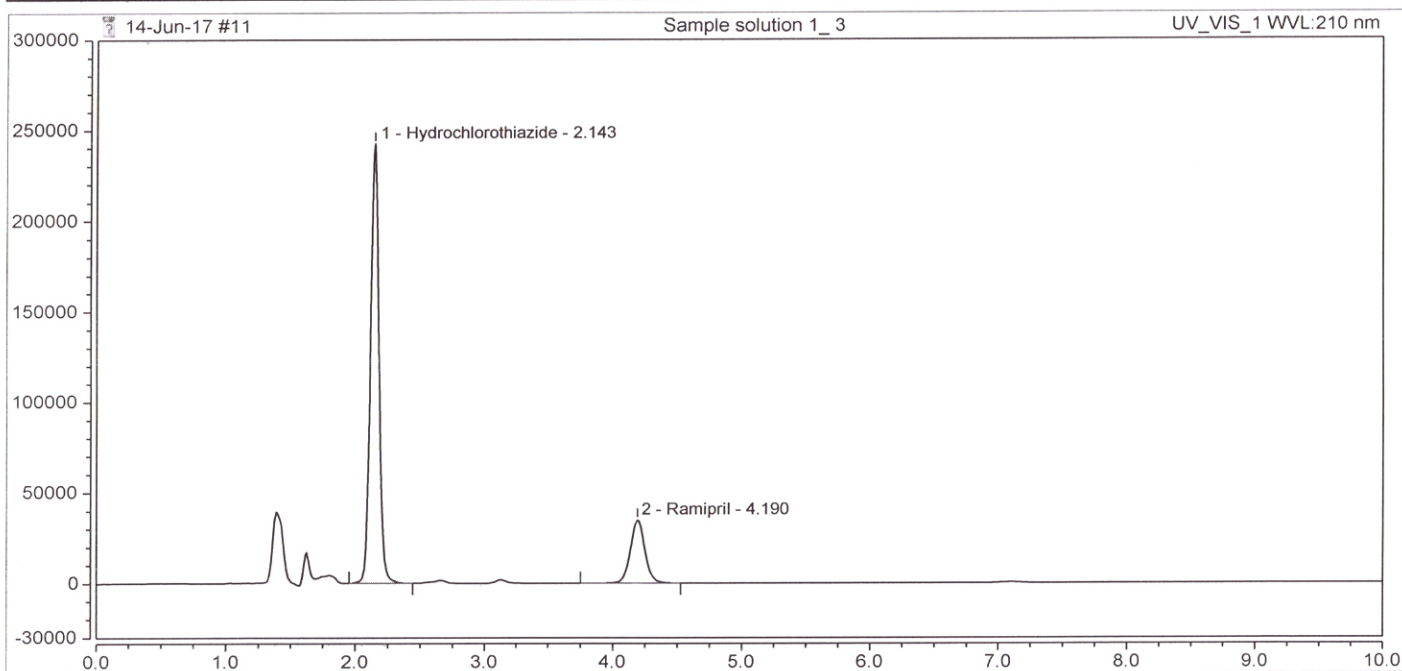
Pankaj
20-Jun-17

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Injection Details

Injection Name:	Sample solution 1_3	Run Time (min):	10.00
Vial Number:	GA5	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 22:26	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



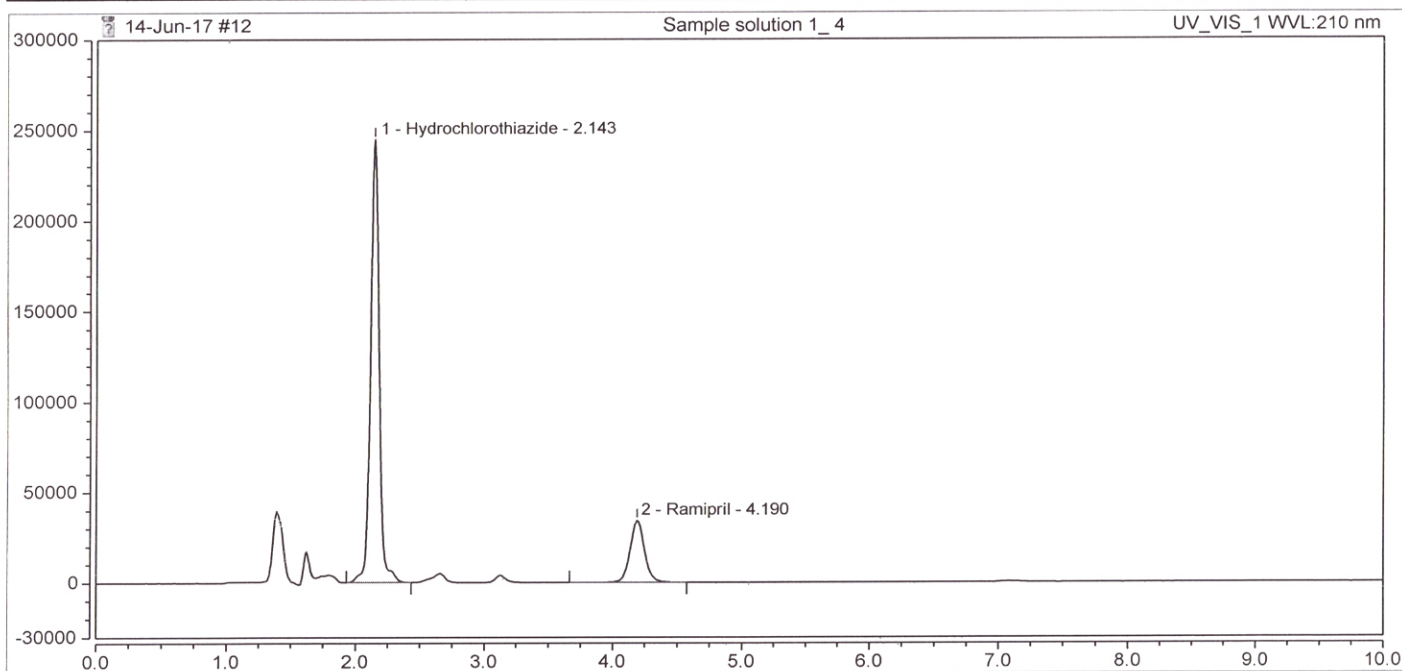
Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18441.409	1.10	5224	218.9	80.23
2	Ramipril	4.190	4544.277	1.07	7040	31.9	19.77
Total:							

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Injection Details

Injection Name:	Sample solution 1_ 4	Run Time (min):	10.00
Vial Number:	GA6	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_ 1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 22:38	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



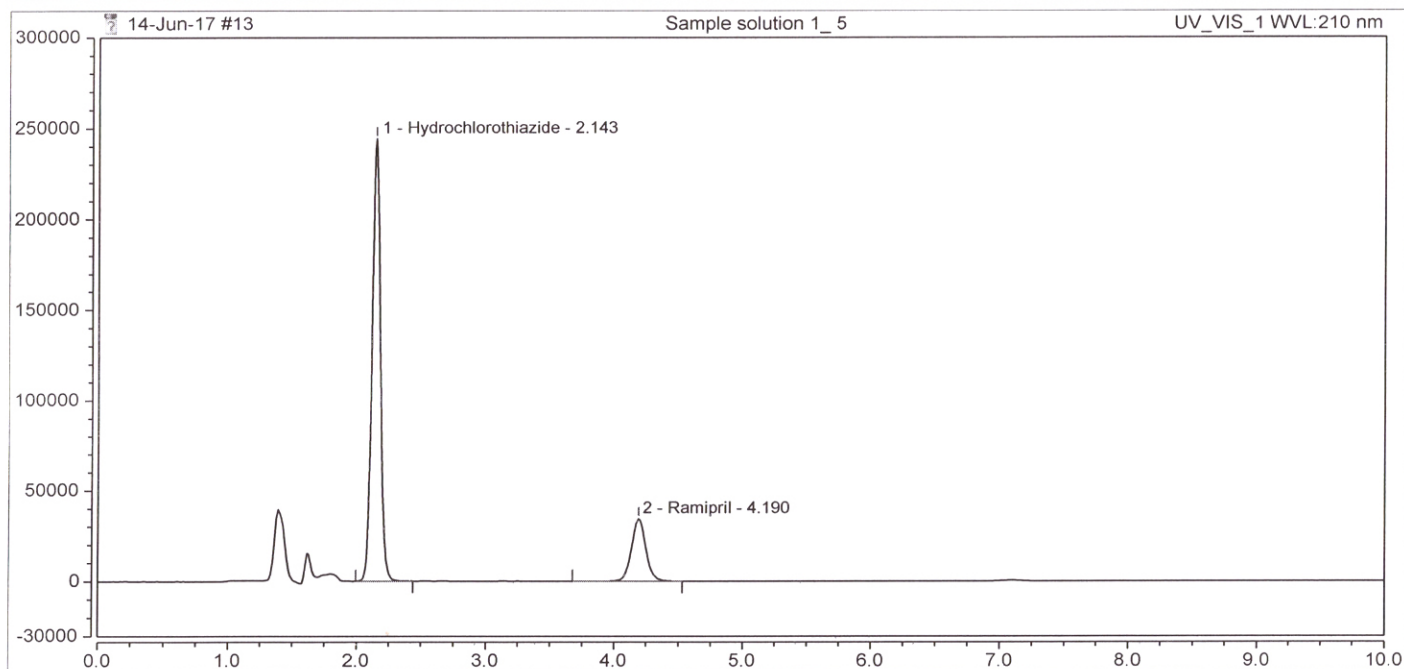
Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	19166.315	1.10	5231	93.1	81.07
2	Ramipril	4.190	4473.981	1.07	7021	13.0	18.93
Total:							

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Injection Details

Injection Name:	Sample solution 1_ 5	Run Time (min):	10.00
Vial Number:	GA7	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_ 1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 22:50	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18426.480	1.10	5251	209.6	80.45
2	Ramipril	4.190	4477.030	1.07	7026	481.3	19.55
Total:							

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20-Jun-17

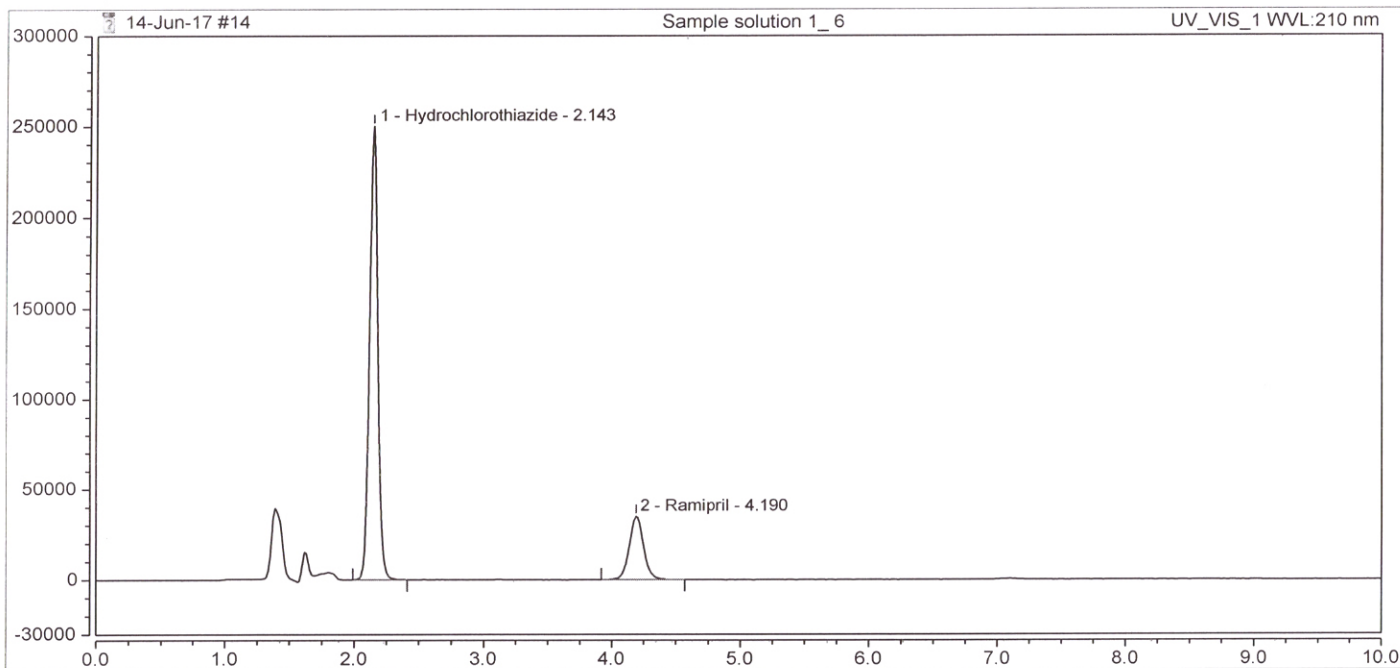
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20-Jun-17

QbD Research & Developement Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 1_6	Run Time (min):	10.00
Vial Number:	GA8	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 23:01	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18872.836	1.10	5247	218.7	80.64
2	Ramipril	4.190	4530.993	1.07	7034	354.1	19.36
Total:							

Default/Integration

Pankaj
20-Jun-17

Chromeleon (c) Dionex
Version 7.2.4.8525

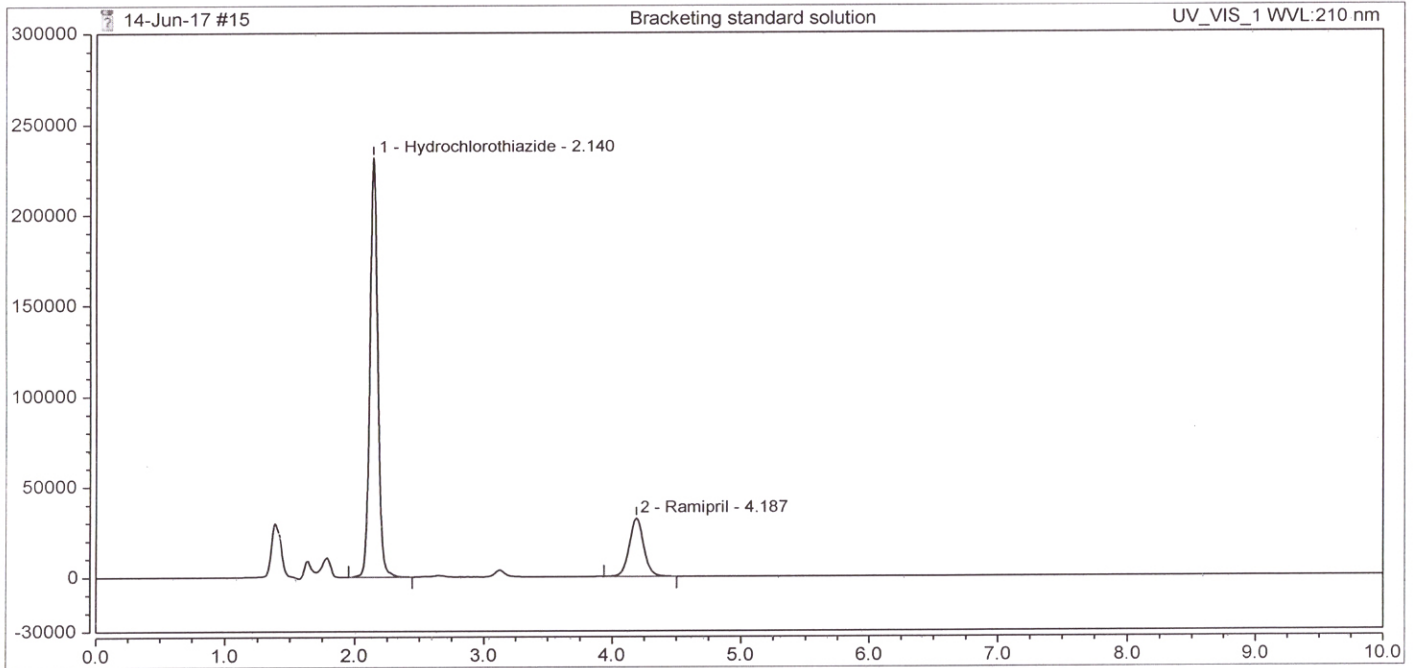
QbD
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Bracketing standard solution	Run Time (min):	10.00
Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 23:13	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.140	16288.528	1.15	6230	69.9	79.65
2	Ramipril	4.187	4162.553	1.07	7044	17.1	20.35
Total:							

Pankaj
20-Jun-17

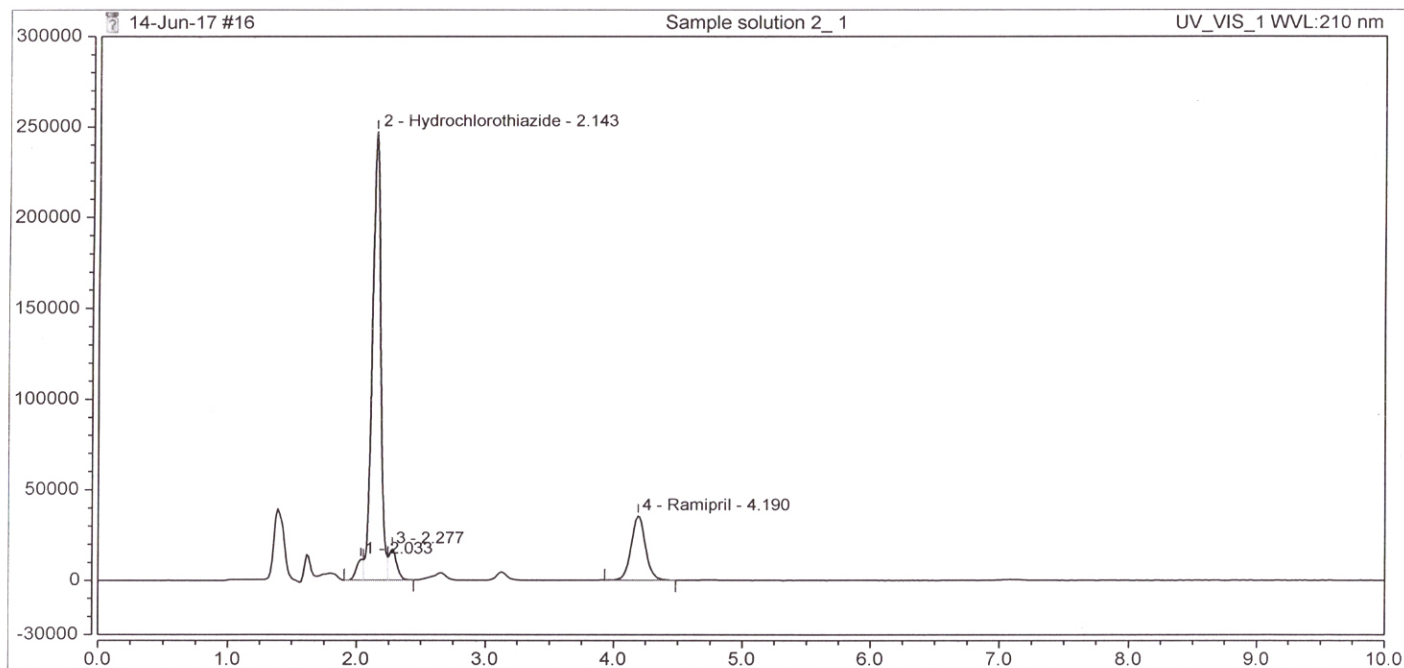
Pankaj
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 2_ 1	Run Time (min):	10.00
Vial Number:	GB1	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_ 2	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 23:25	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1		2.033	699.469	n.a.	n.a.	n.a.	2.77
2	Hydrochlorothiazid	2.143	18735.899	n.a.	5245	91.3	74.12
3		2.277	1241.957	n.a.	3632	n.a.	4.91
4	Ramipril	4.190	4599.252	1.07	7079	13.3	18.20
Total:							

Pankaj Gurav
20-Jun-17

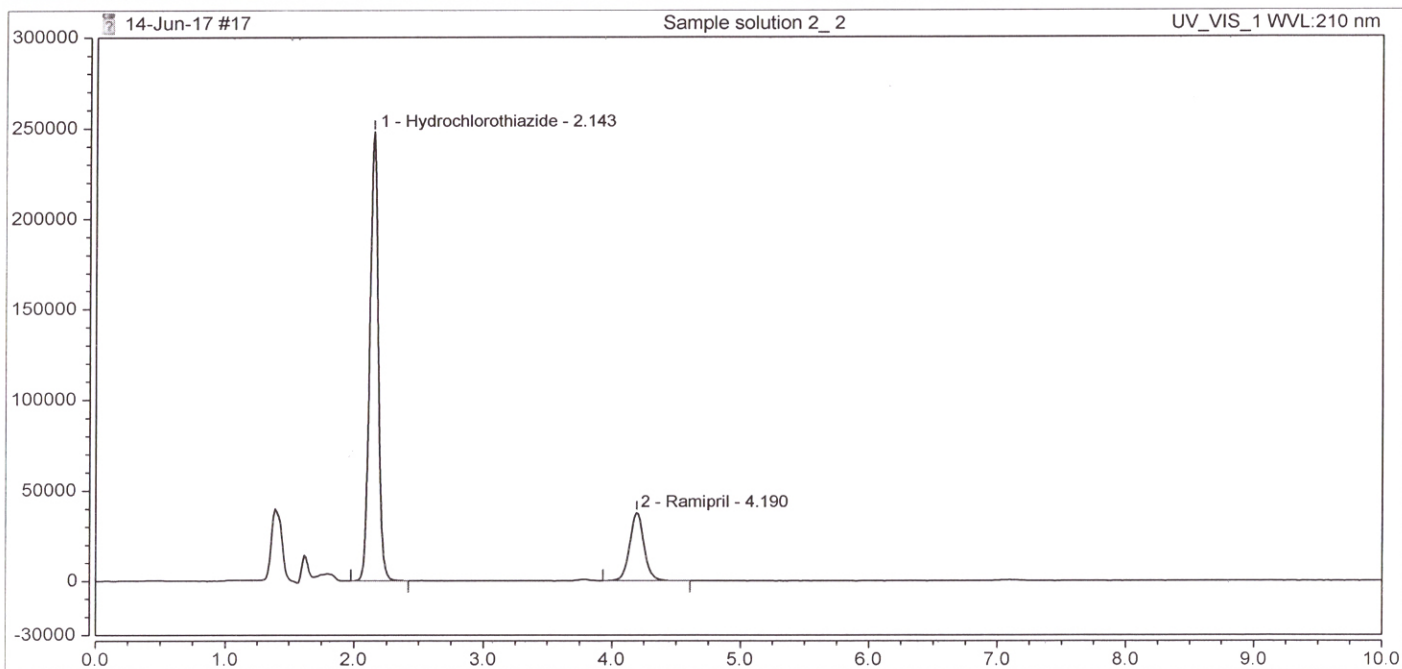
Pankaj Gurav
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 2_2	Run Time (min):	10.00
Vial Number:	GB2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 23:37	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



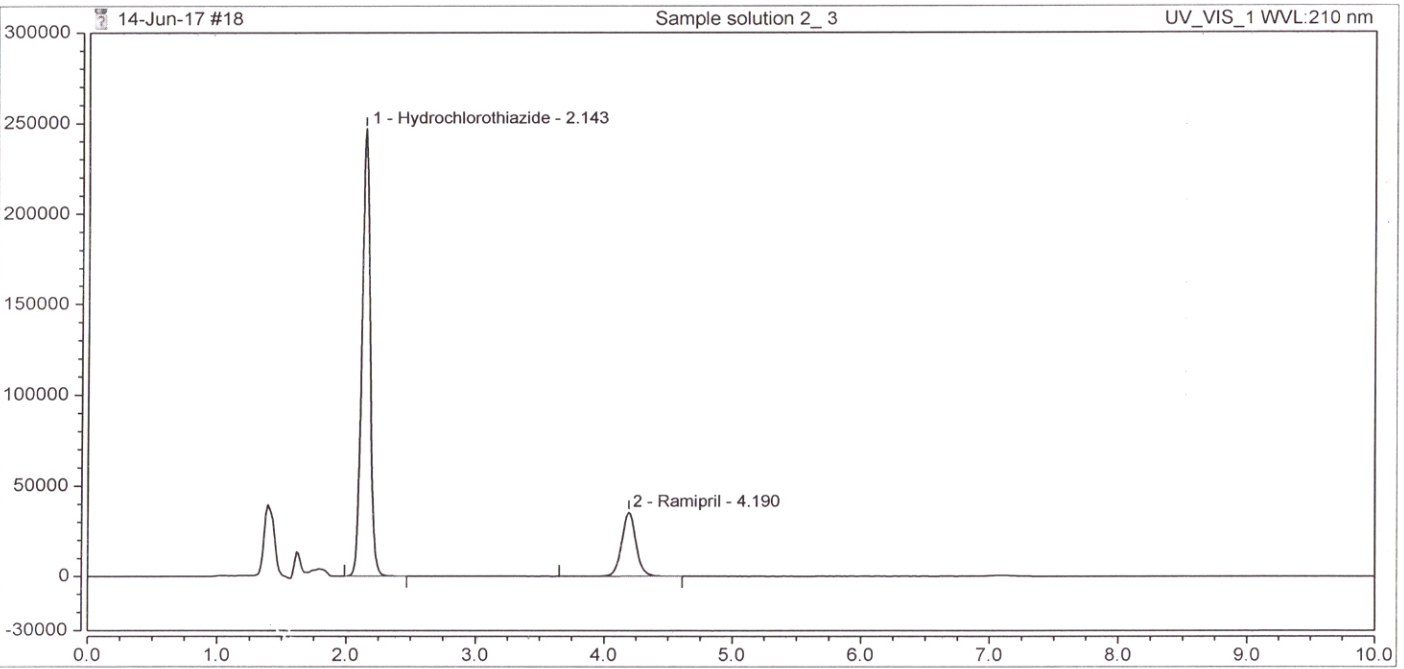
Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazide	2.143	18700.891	1.10	5251	230.8	79.34
2	Ramipril	4.190	4870.020	1.07	7107	92.3	20.66
Total:							

QbD Research & Developement Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 2_3	Run Time (min):	10.00
Vial Number:	GB3	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	14-Jun-17 23:48	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18569.325	1.10	5288	216.0	80.06
2	Ramipril	4.190	4624.763	1.06	7075	598.4	19.94
Total:							

Pankaj
20-Jun-17

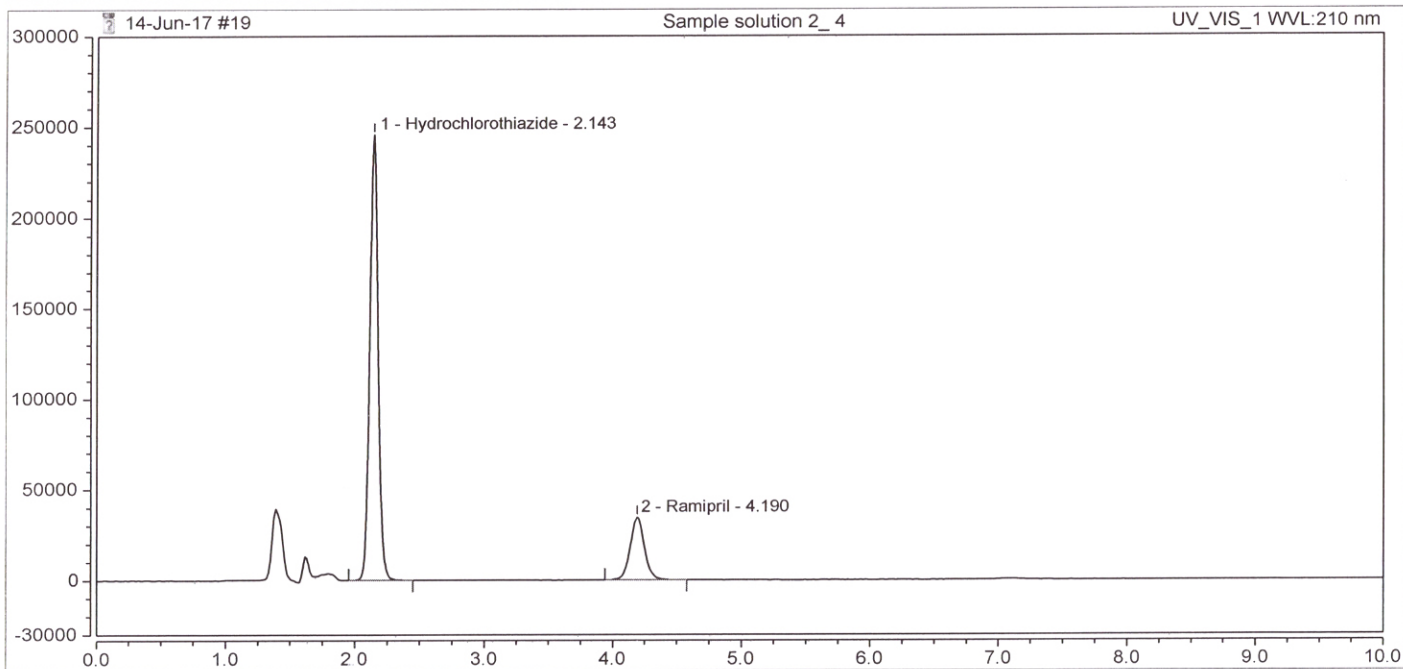
Pankaj
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 2_4	Run Time (min):	10.00
Vial Number:	GB4	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 00:00	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18438.851	1.10	5306	254.8	80.53
2	Ramipril	4.190	4457.275	1.07	7102	450.8	19.47
Total:							

[Signature]
20-Jun-17

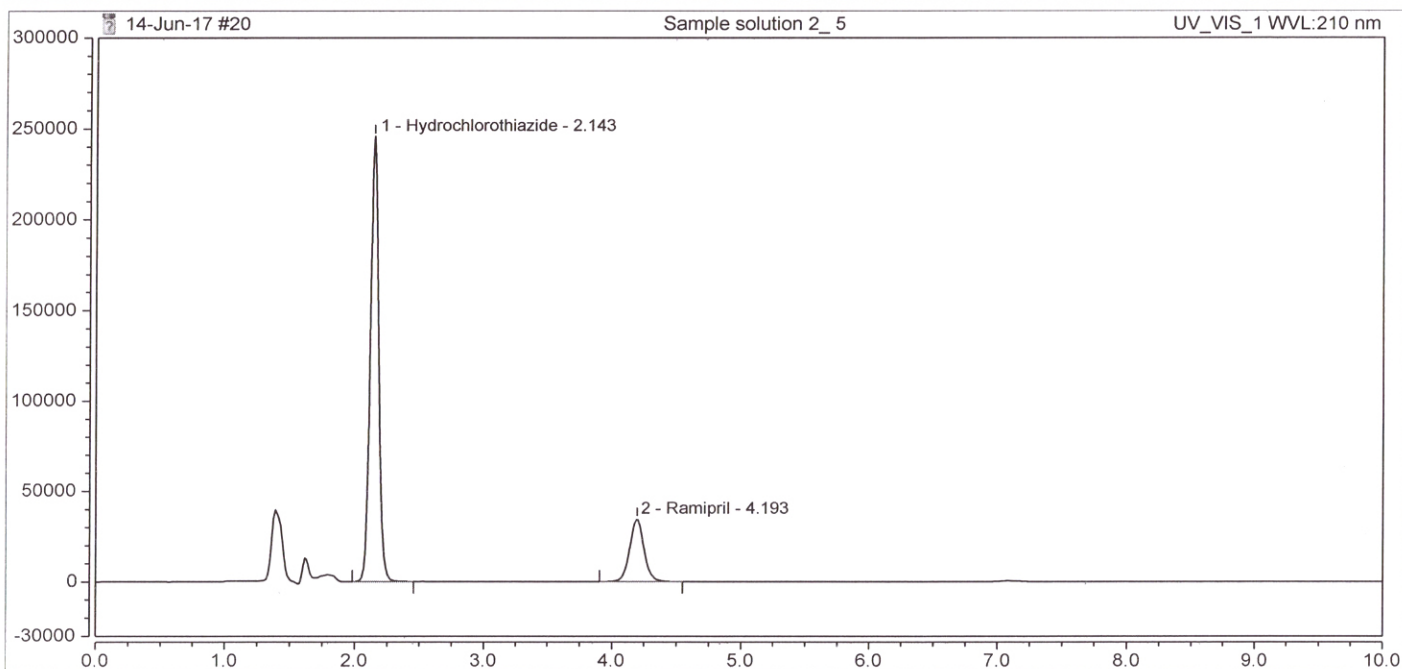
[Signature]
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 2_ 5	Run Time (min):	10.00
Vial Number:	GB5	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_ 1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 00:12	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results

No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18524.978	1.10	5255	230.0	80.57
2	Ramipril	4.193	4468.793	1.04	7100	523.3	19.43
Total:							

Pankaj
20-Jun-17

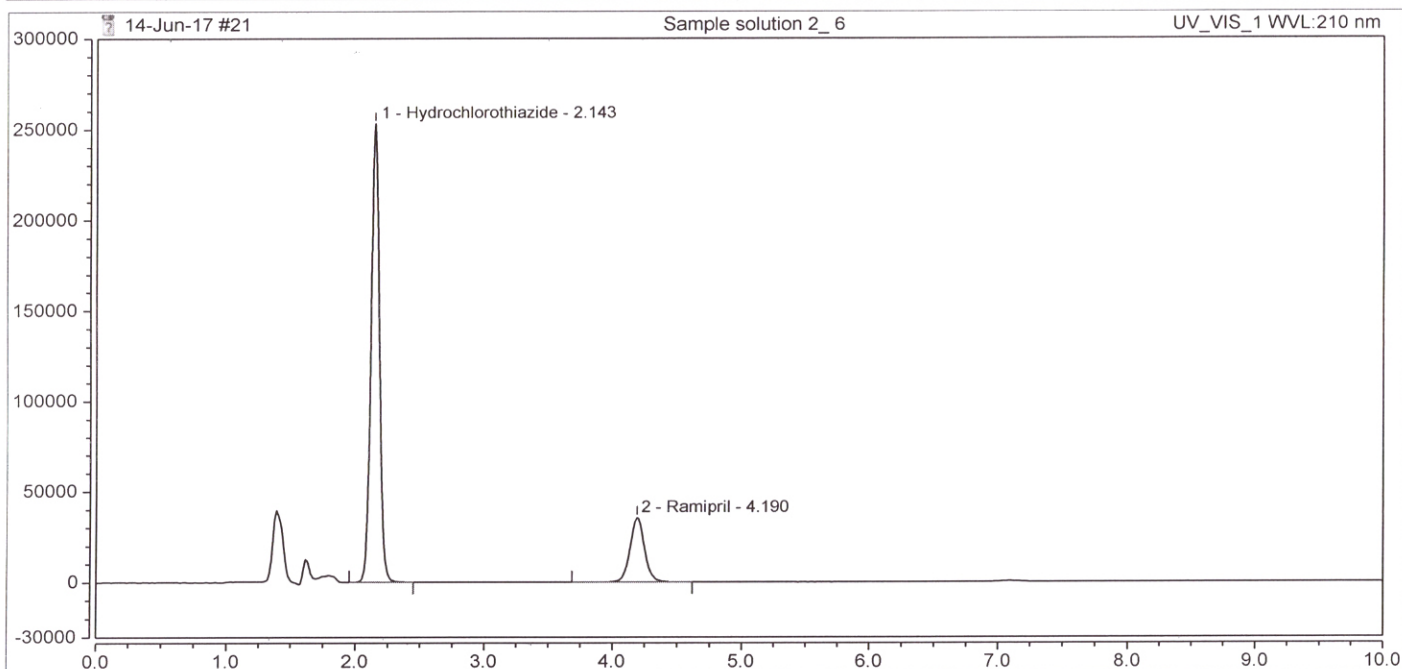
Pankaj
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 2_ 6	Run Time (min):	10.00
Vial Number:	GB6	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_ 1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 00:24	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	19002.493	1.11	5310	266.8	80.44
2	Ramipril	4.190	4620.786	1.07	7092	504.6	19.56
Total:							

Pankaj Gurav
20-Jun-17

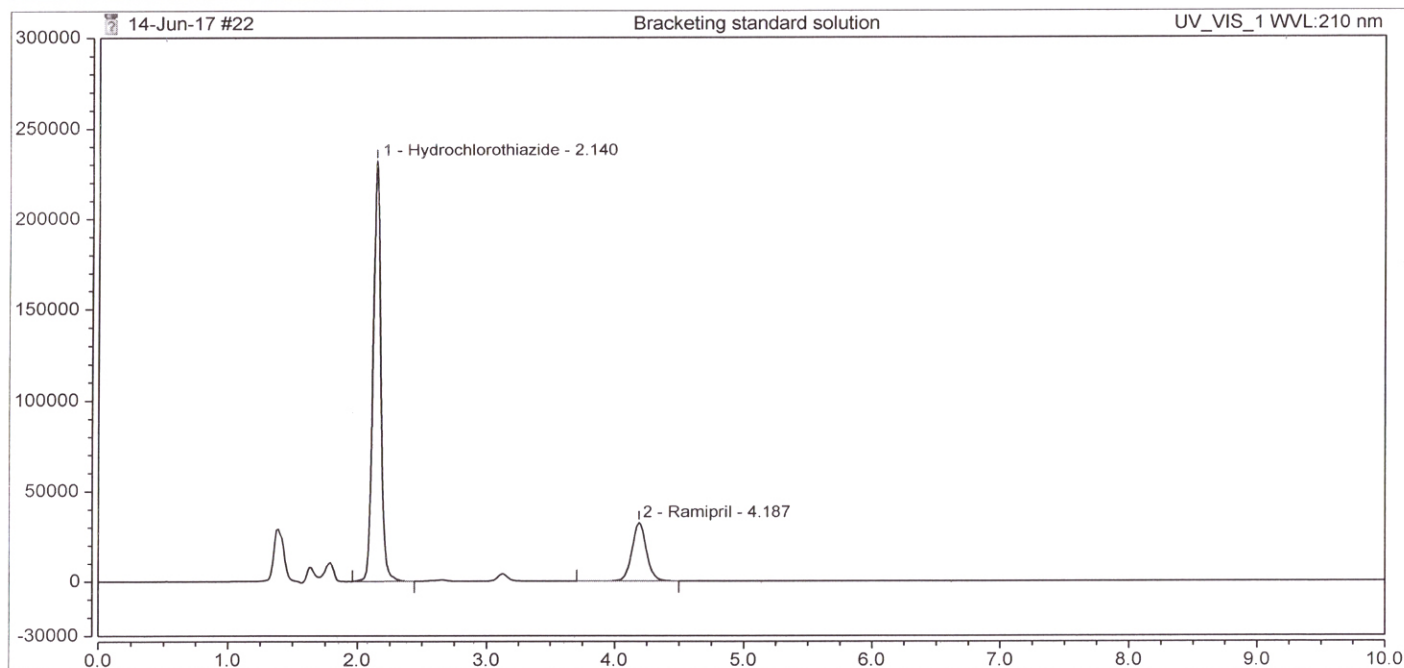
Pankaj Gurav
20-Jun-17

QbD Research & Developement Pvt.Ltd.

Injection Details

Injection Name:	Bracketing standard solution	Run Time (min):	10.00
Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_ 1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 00:36	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



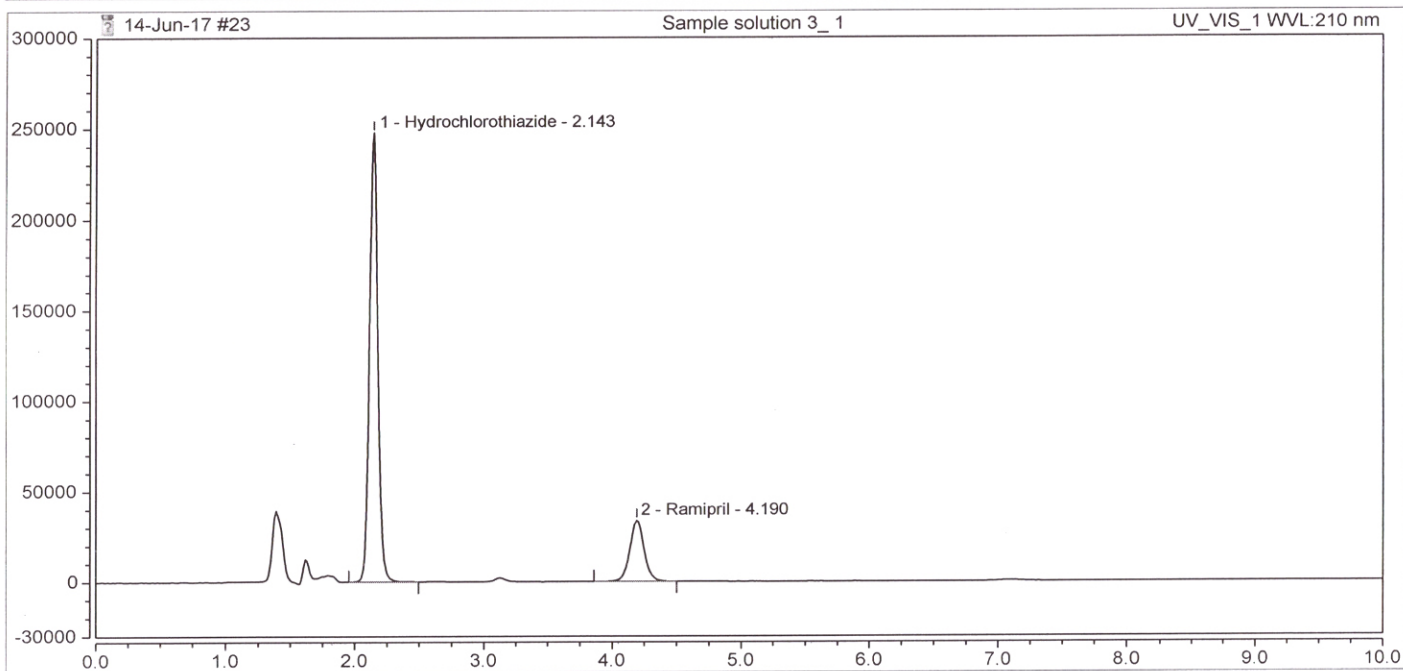
Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.140	16369.653	1.15	6215	68.2	79.55
2	Ramipril	4.187	4208.683	1.07	7035	15.3	20.45
Total:							

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 3_1	Run Time (min):	10.00
Vial Number:	GB7	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 00:47	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18672.417	1.10	5311	226.7	81.02
2	Ramipril	4.190	4373.165	1.06	7106	31.0	18.98
Total:							

Default/Integration

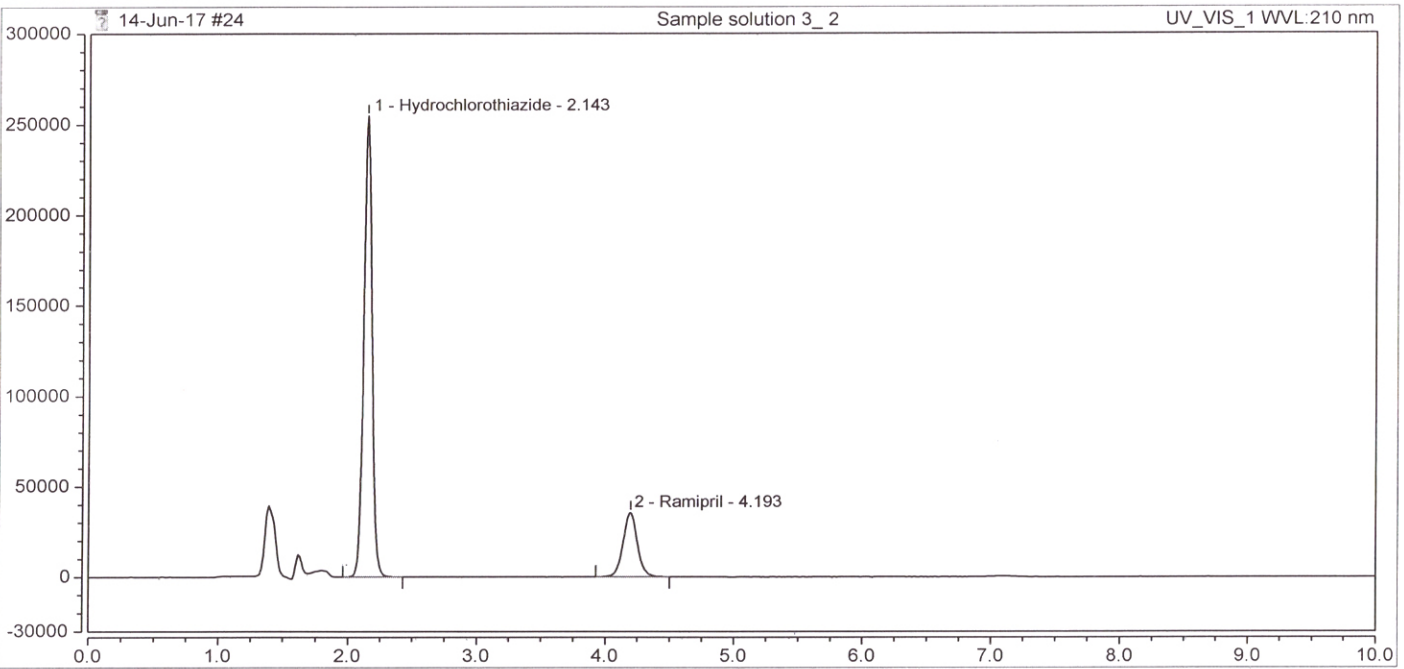
Chromeleon (c) Dionex
Version 7.2.4.8525Pankaj
20-Jun-17Pankaj
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 3_2	Run Time (min):	10.00
Vial Number:	GB8	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 00:59	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	19145.038	1.10	5293	260.0	80.69
2	Ramipril	4.193	4580.608	1.05	7144	563.1	19.31
Total:							

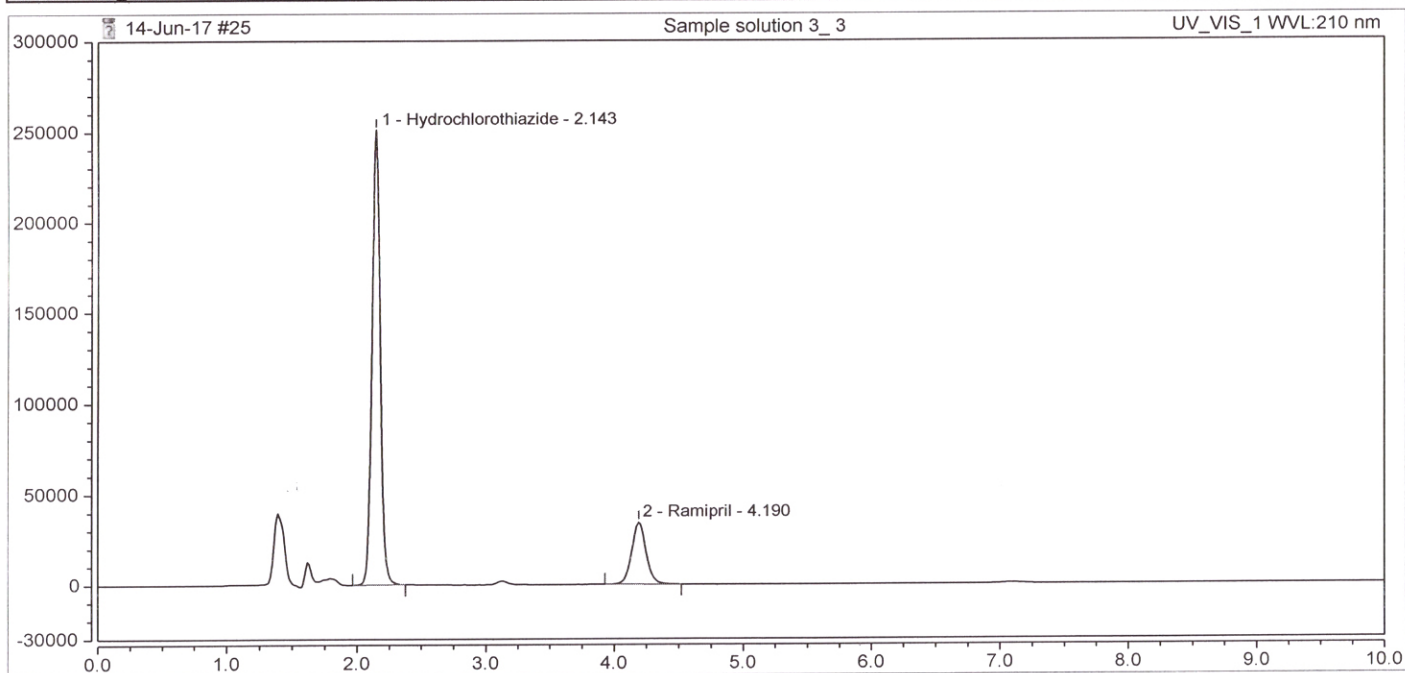
Pankaj Gurav
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 3_3	Run Time (min):	10.00
Vial Number:	GC1	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 01:11	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	$\mu\text{AU}\cdot\text{min}$				%
1	Hydrochlorothiazid	2.143	18848.707	1.11	5327	235.3	80.98
2	Ramipril	4.190	4428.172	1.06	7129	32.0	19.02
Total:							

Pankaj Gurav
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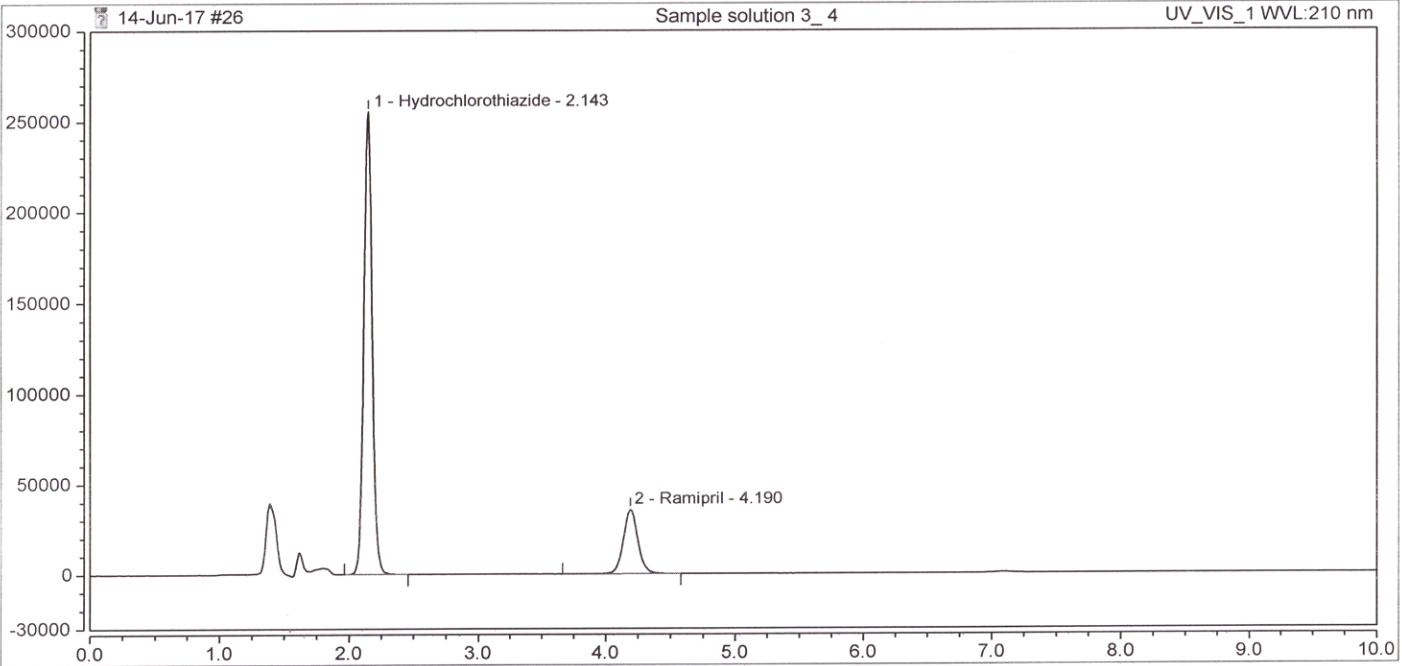
Pankaj Gurav
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 3_4	Run Time (min):	10.00
Vial Number:	GC2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 01:23	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	19307.016	1.09	5254	256.1	80.58
2	Ramipril	4.190	4653.372	1.06	7080	540.7	19.42
Total:							

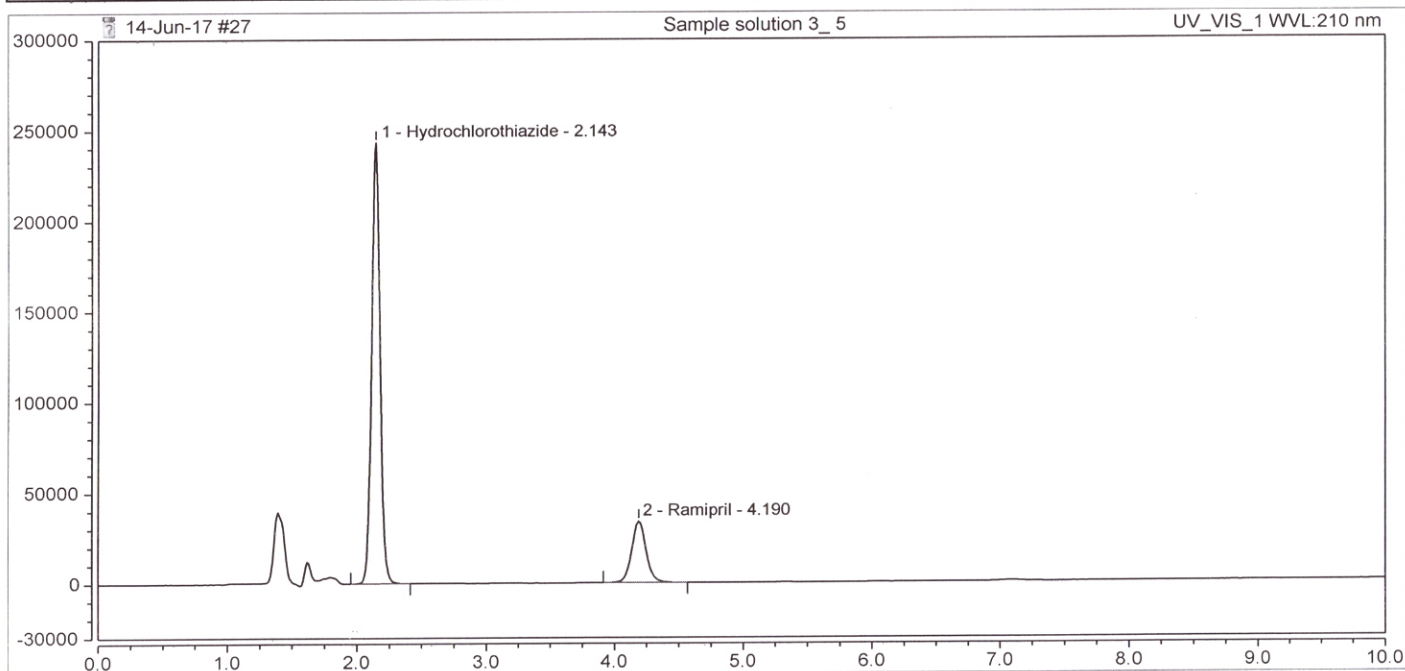
Pankaj Gurav
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 3_5	Run Time (min):	10.00
Vial Number:	GC3	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 01:34	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18249.211	1.10	5344	249.8	80.66
2	Ramipril	4.190	4375.991	1.06	7120	466.7	19.34
Total:							

Pankaj Gurav
20-Jun-17

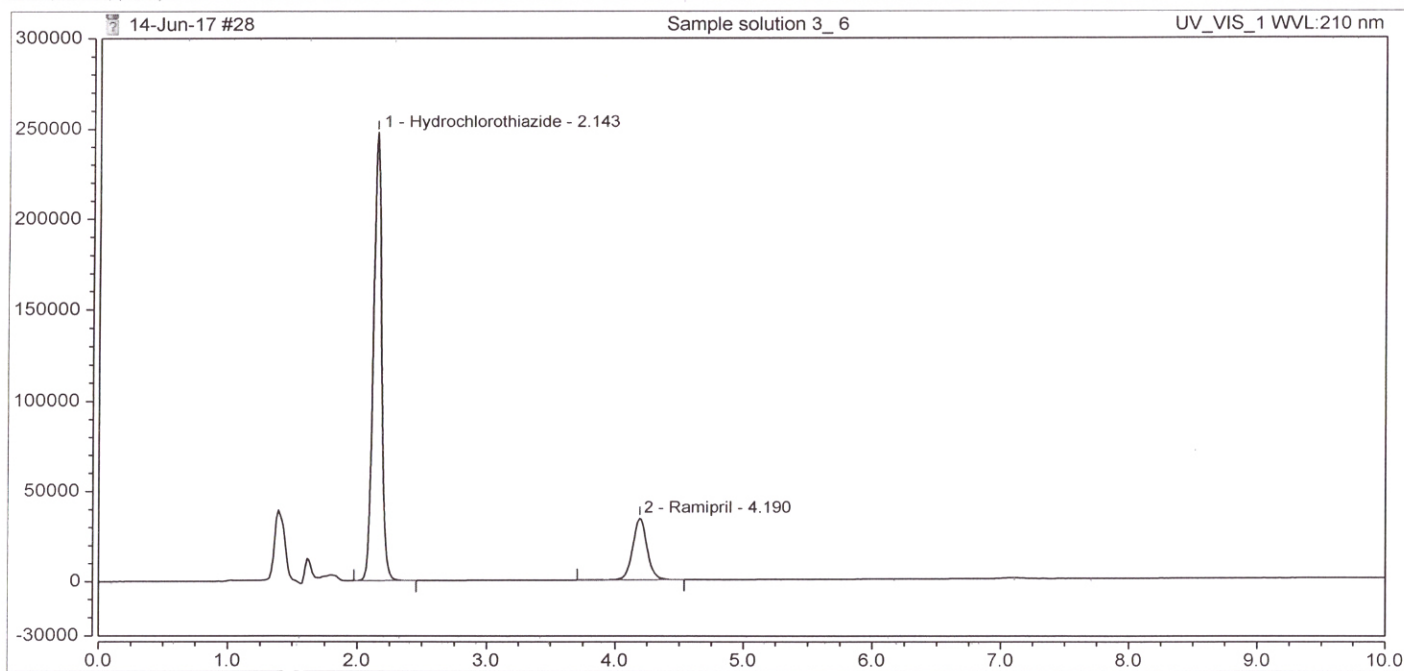
Pankaj Gurav
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 3_6	Run Time (min):	10.00
Vial Number:	GC4	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 01:46	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



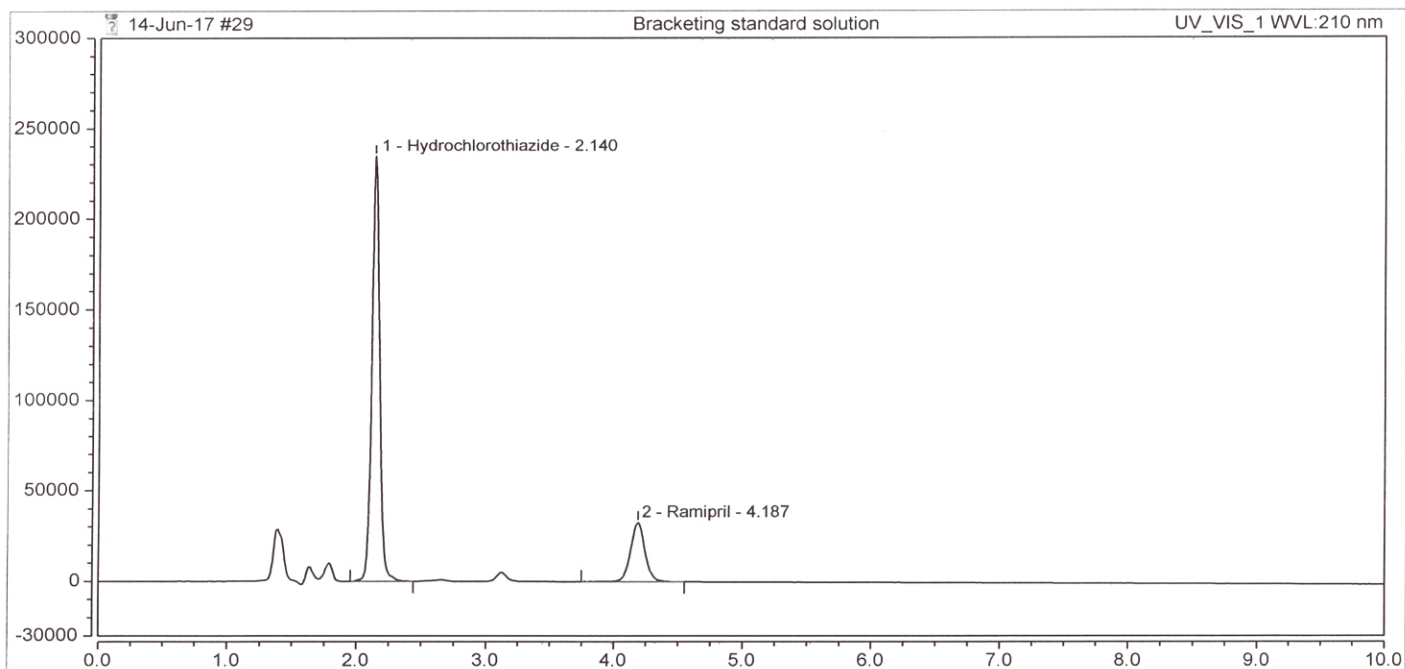
Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18452.504	1.11	5415	275.2	80.62
2	Ramipril	4.190	4434.577	1.06	7117	577.2	19.38
Total:							

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Bracketing standard solution	Run Time (min):	10.00
Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 01:58	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



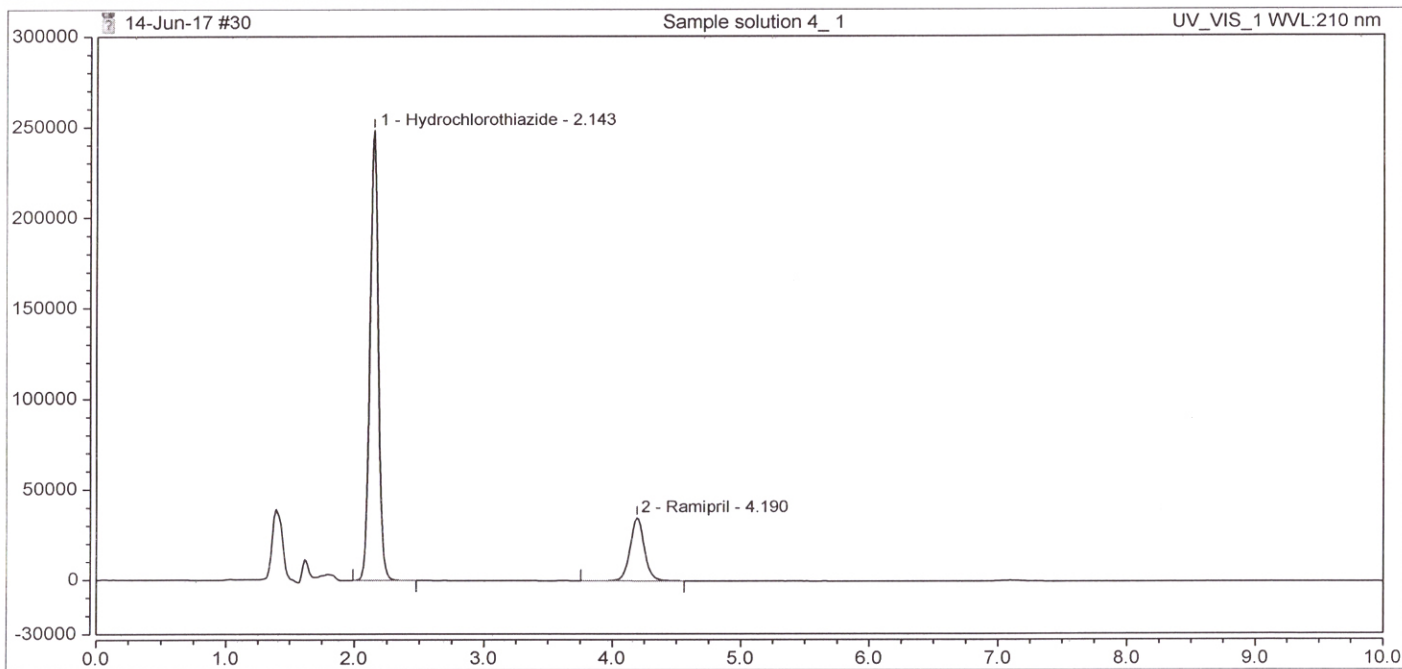
Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	$\mu\text{AU}\cdot\text{min}$				%
1	Hydrochlorothiazid	2.140	16431.626	1.14	6314	73.2	79.58
2	Ramipril	4.187	4216.133	1.05	7107	13.0	20.42
Total:							

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Injection Details

Injection Name:	Sample solution 4_1	Run Time (min):	10.00
Vial Number:	GC5	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 02:10	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results

No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazide	2.143	18572.085	1.10	5387	255.1	80.37
2	Ramipril	4.190	4535.678	1.06	7128	481.8	19.63
Total:							

Pankaj Gurav
20-Jun-17

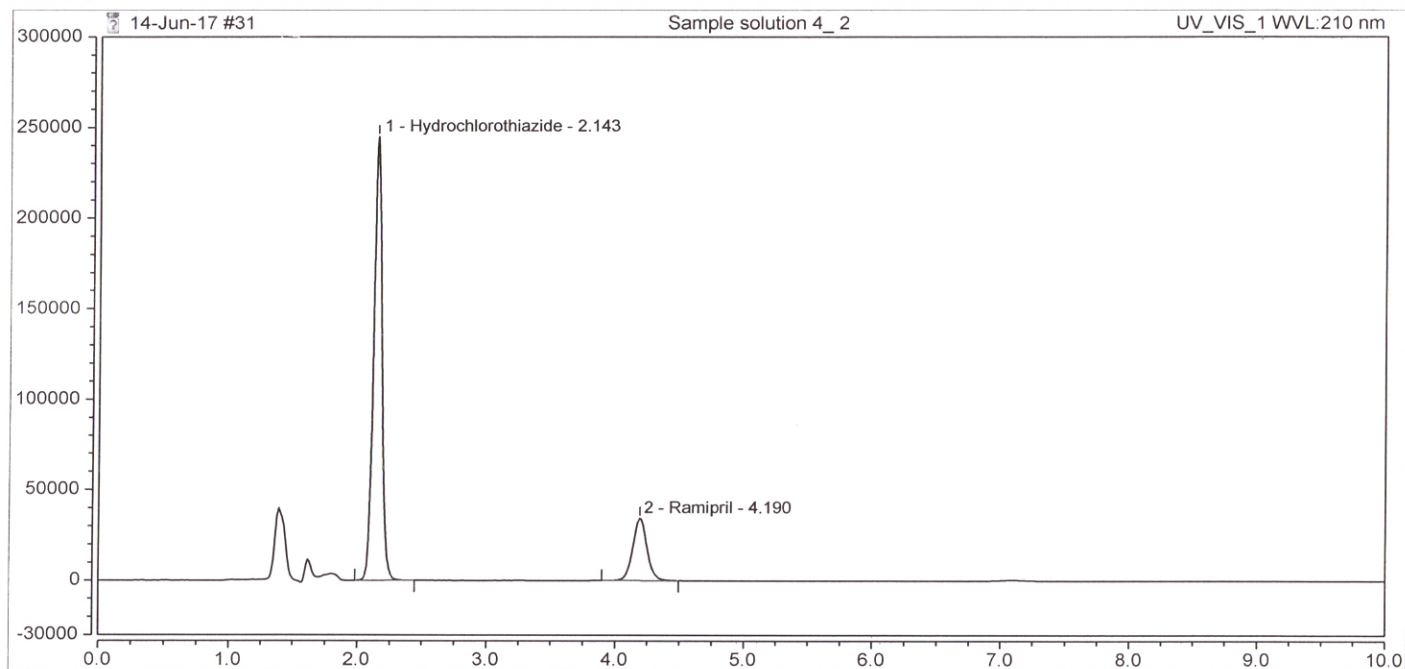
Pankaj Gurav
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 4_2	Run Time (min):	10.00
Vial Number:	GC6	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 02:21	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazide	2.143	18272.022	1.11	5398	230.5	80.48
2	Ramipril	4.190	4432.642	1.07	7144	566.2	19.52
Total:							

Pankaj Gurav
20-Jun-17

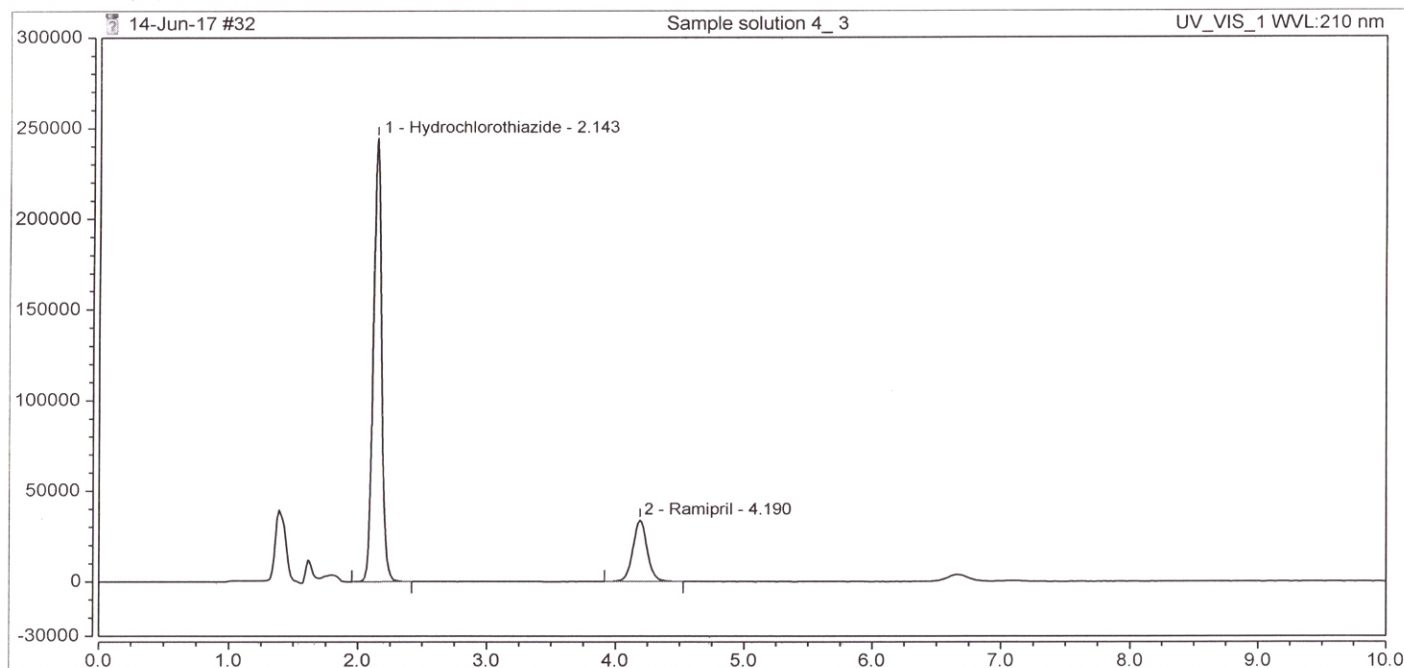
Pankaj Gurav
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 4_3	Run Time (min):	10.00
Vial Number:	GC7	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 02:33	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18274.390	1.09	5404	252.4	80.71
2	Ramipril	4.190	4368.276	1.05	7157	19.0	19.29
Total:							

Pankaj
20 Jun-17

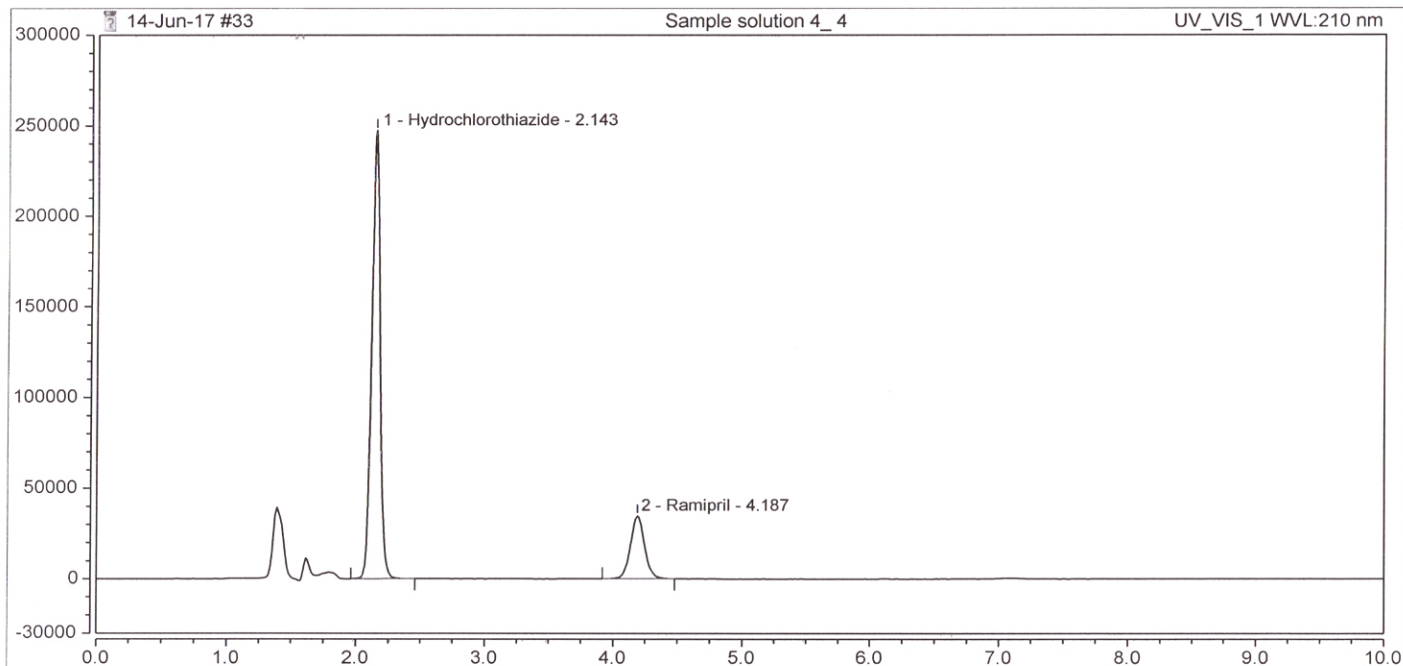
Pankaj
20-Jun-17

QbD Research & Development Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 4_4	Run Time (min):	10.00
Vial Number:	GC8	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 02:45	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazide	2.143	18446.851	1.09	5426	250.0	80.49
2	Ramipril	4.187	4471.988	1.07	7110	561.8	19.51
Total:							

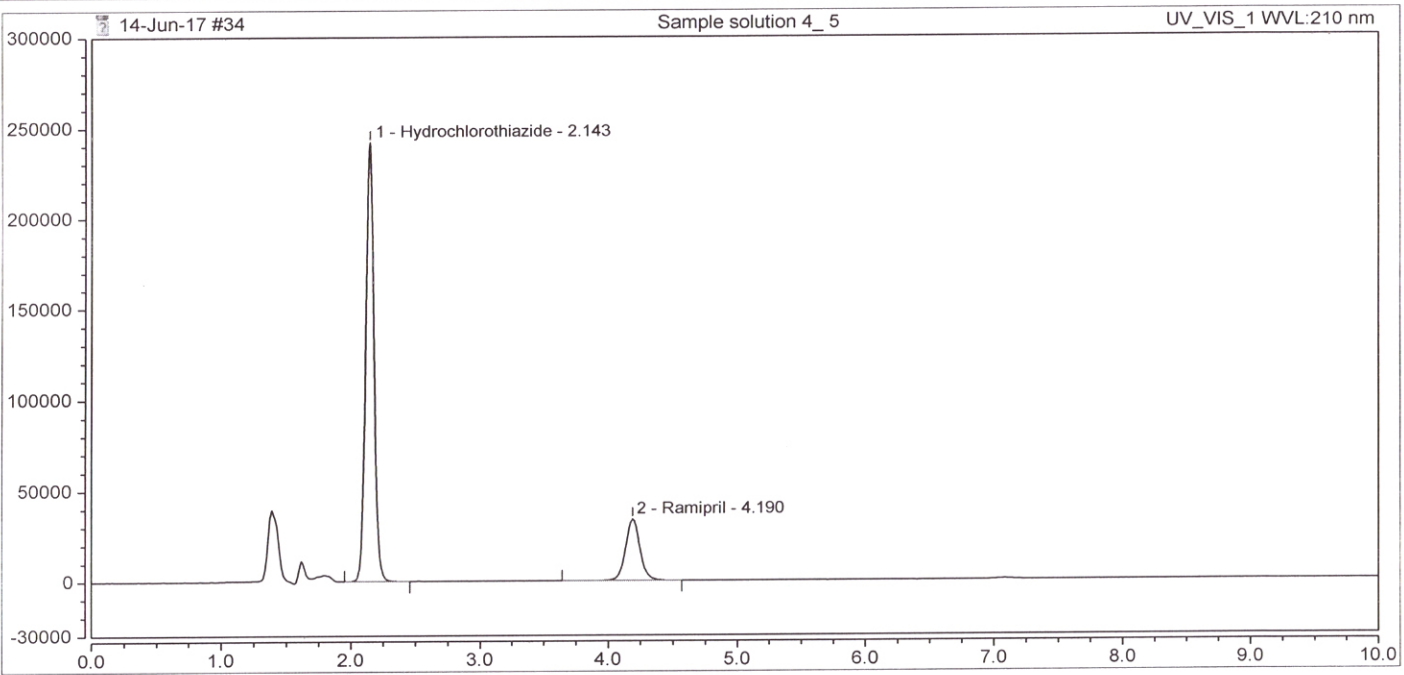
20-Jun-17

QbD Research & Developement Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 4_5	Run Time (min):	10.00
Vial Number:	GD1	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 02:57	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18148.728	1.09	5358	256.3	80.39
2	Ramipril	4.190	4427.912	1.06	7121	458.7	19.61
Total:							

Pankaj
20-Jun-17

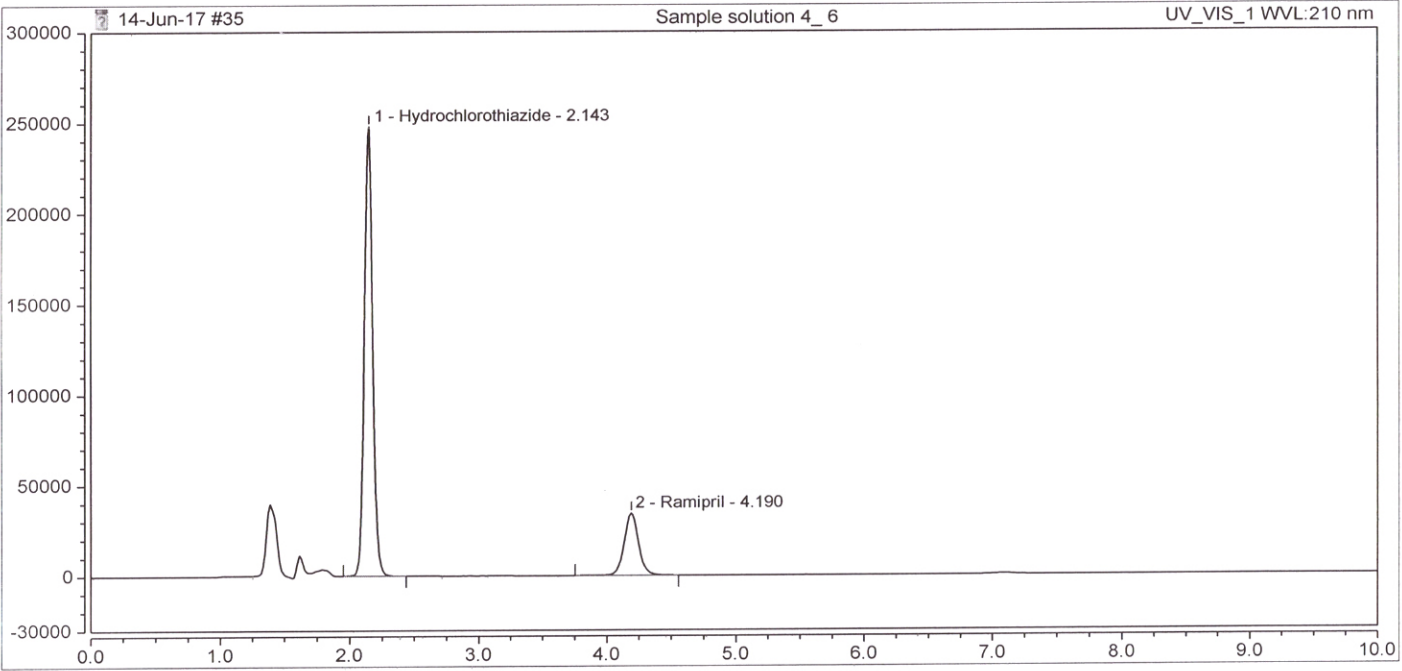
Pankaj
20-Jun-17

QbD Research & Developement Pvt.Ltd.

Injection Details

Injection Name:	Sample solution 4_6	Run Time (min):	10.00
Vial Number:	GD2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 03:08	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	μAU*min				%
1	Hydrochlorothiazid	2.143	18407.878	1.10	5461	249.8	80.54
2	Ramipril	4.190	4446.813	1.05	7157	513.6	19.46
Total:							

Default/Integration

20-Jun-17

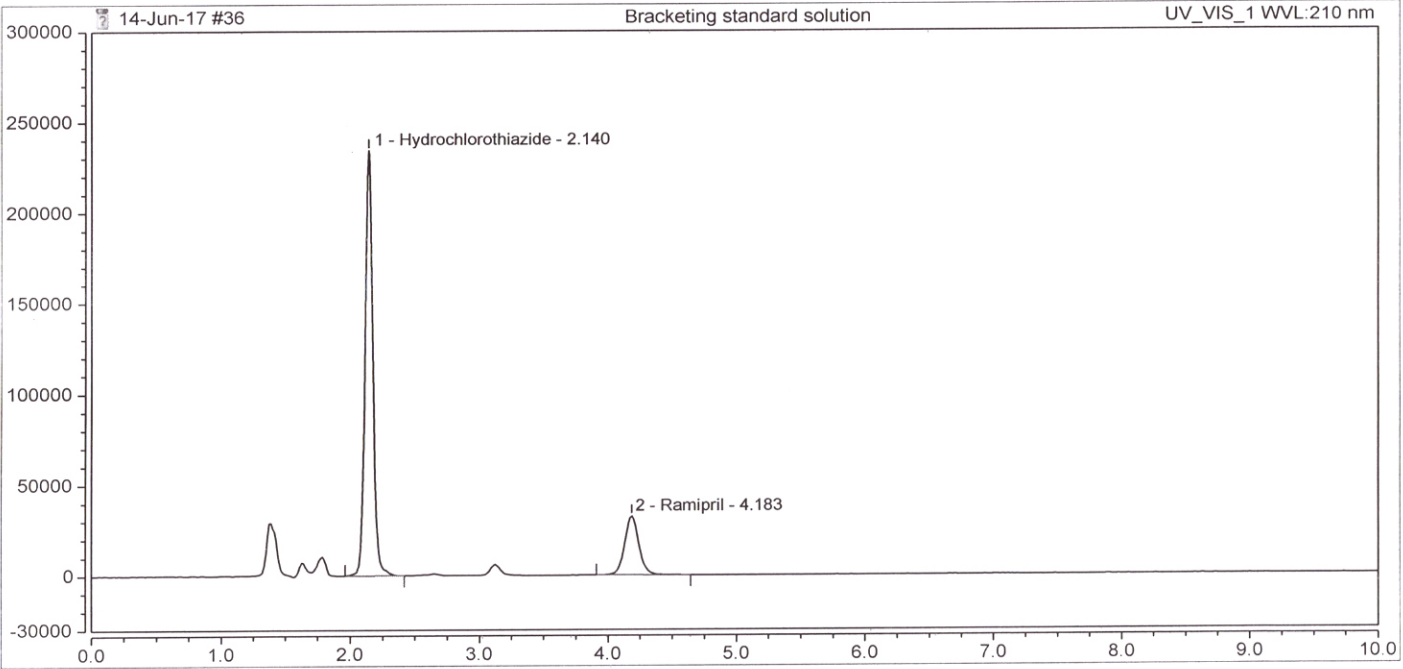
Chromeleon (c) Dionex
Version 7.2.4.8525

QbD Research & Developement Pvt.Ltd.

Injection Details

Injection Name:	Bracketing standard solution	Run Time (min):	10.00
Vial Number:	GA2	Injection Volume:	10.00
Injection Type:	Unknown	Channel:	UV_VIS_1
Calibration Level:		Wavelength:	210
Instrument Method:	Ramithiazide Dissolution	Bandwidth:	1
Processing Method:	PR Method_1	Dilution Factor:	1.0000
Injection Date/Time:	15-Jun-17 03:20	Sample Weight:	1.0000
User Name:	Pankaj Gurav	Sample Weight:	1.0000

Chromatogram



Integration Results							
No.	Peak Name	Retention Time	Area	Asymmetry (EP)	Plates (USP)	S/N	Rel.Area
		min	µAU*min				%
1	Hydrochlorothiazid	2.140	16418.346	1.13	6336	68.0	79.65
2	Ramipril	4.183	4195.203	1.06	7098	10.5	20.35
Total:							

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20-Jun-17

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20-Jun-17