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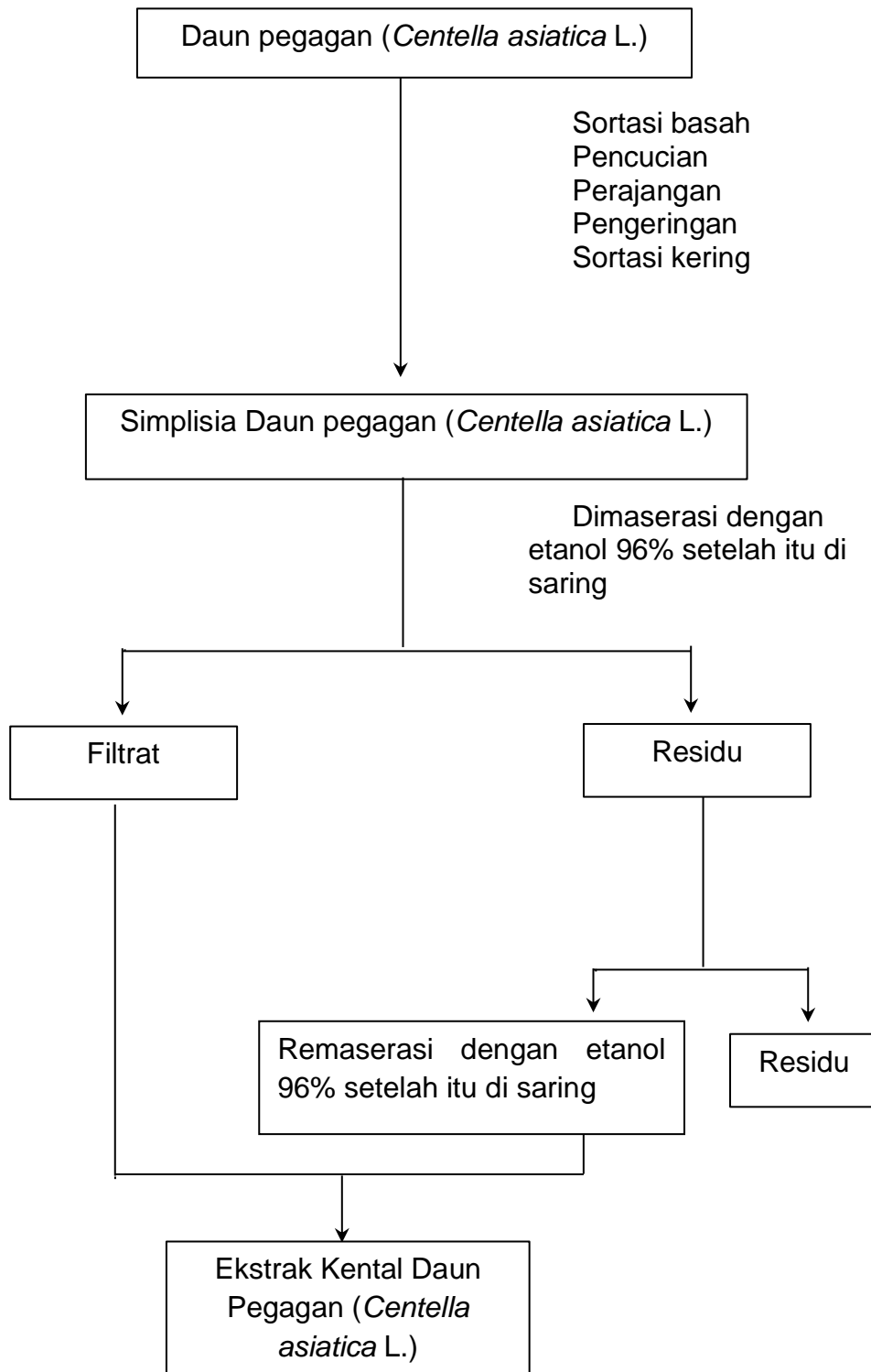
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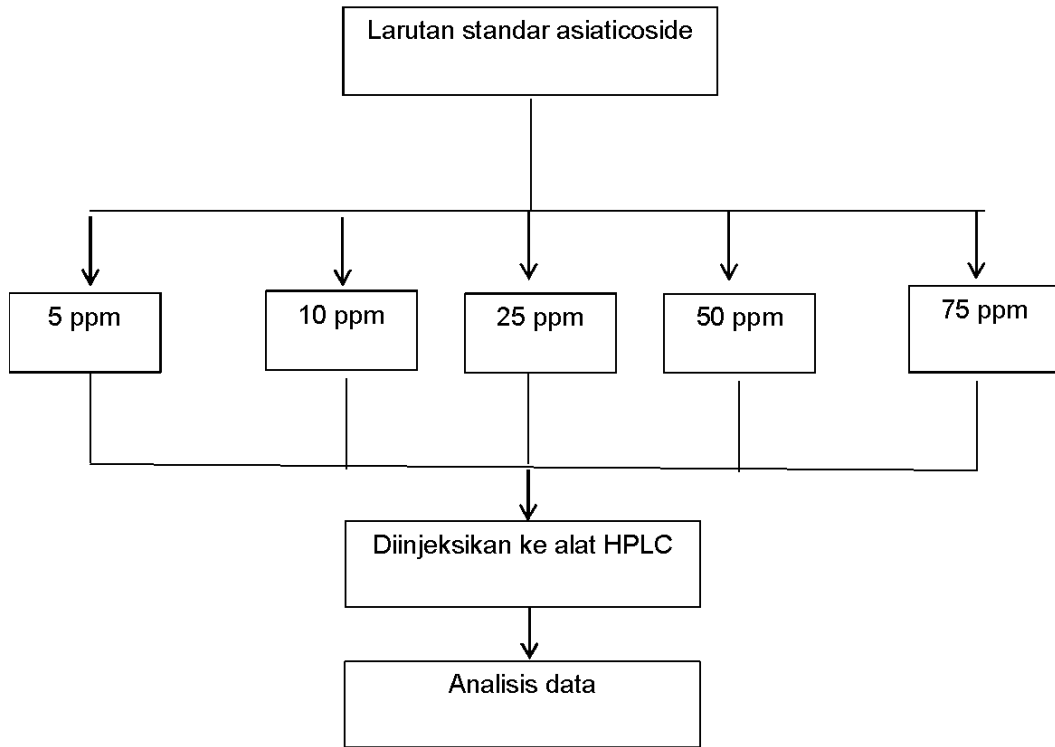
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LAMPIRAN


Lampiran 1. Skema Kerja Pembuatan Ekstrak Etanol Daun Pegagan (*Centella asiatica* L.)



Lampiran 2 : Skema Kerja Penentuan Kurva Baku Standar Asiaticoside



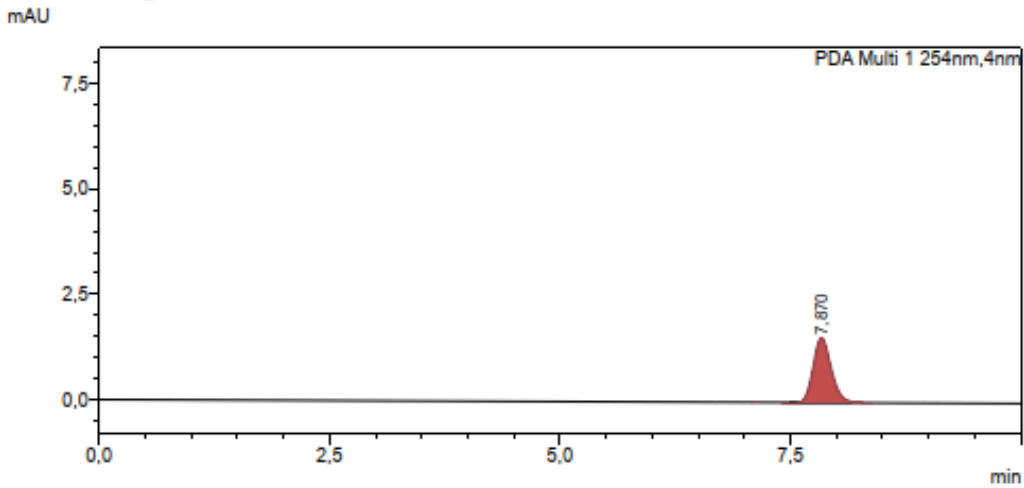
Lampiran 3 : Kromatogram Seri Konsentrasi Baku asiaticoside

 **Analysis Report**

<Sample Information>

Sample Name : Asiaticoside
Sample ID : 5ppm asiaticoside
Data Filename : 5ppm asiaticoside (Replication 1)
Method Filename : 101.1.22.lcm
Batch Filename :
Vial # : 1-1
Injection Volume : 20 uL
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Date Processed : 1/11/2022 10:38:30 PM
Sample Type : Unknown
Acquired by : System Administrator
Processed by : System Administrator

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<Peak Table>

PDA Ch1 254nm

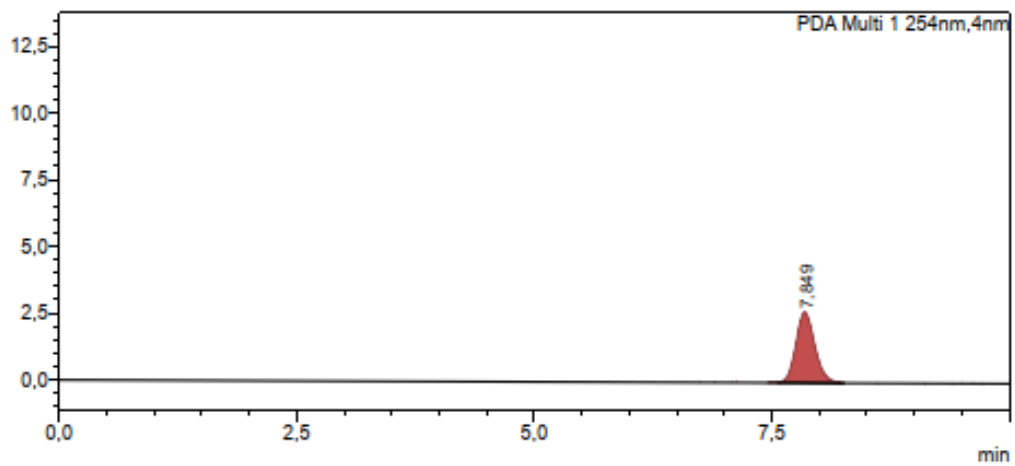
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	7.870	18571	1543	0.000			Asiaticoside
Total		18571	1543	0.000			

<Sample Information>

Sample Name : Asiaticoside
 Sample ID : 5ppm asiaticoside
 Data Filename : 5ppm asiaticoside (Replication 2)
 Method Filename : 12.1.22.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 1/12/2022 10:29:31 AM
 Date Processed : 1/12/2022 10:39:33 AM
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<Peak Table>

PDA Ch1 254nm

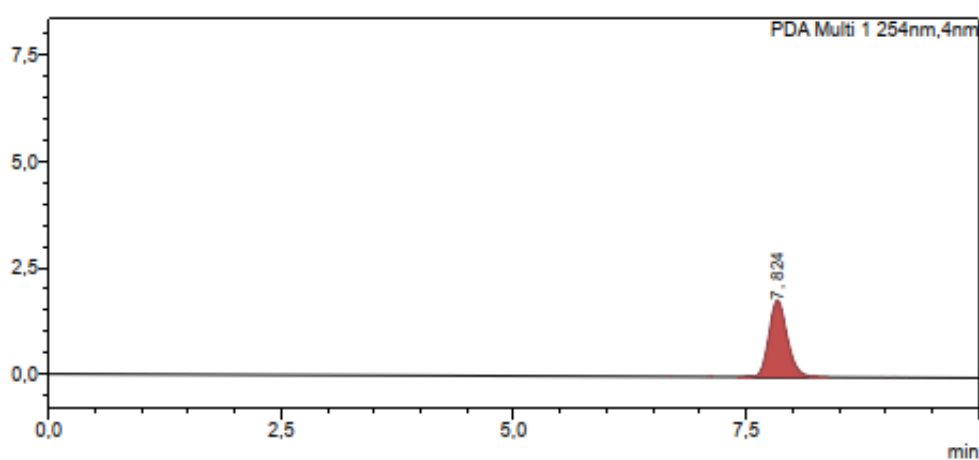
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1	7,849	18537	1578	0,000			Asiaticoside
Total		18537	1578	0,000			

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Sample Name : Asiaticoside
 Sample ID : 5ppm asiaticoside
 Data Filename : 5ppm asiaticoside (Replication 3)
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 Batch Filename :
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PDA Ch1 254nm

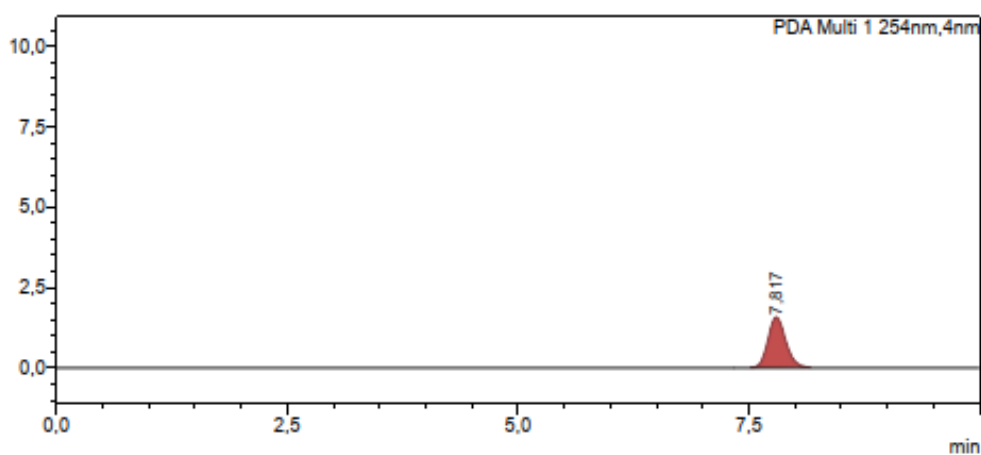
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1	7.824	18502	1612	0,000			Asiaticoside
Total		18502	1612	0,000			

<Sample Information>

Sample Name : Asiaticoside
 Sample ID : 10ppm asiaticoside
 Data Filename : 10ppm asiaticoside (Replication 1)
 Method Filename : 101.1.22.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
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<Peak Table>

PDA Ch1 254nm

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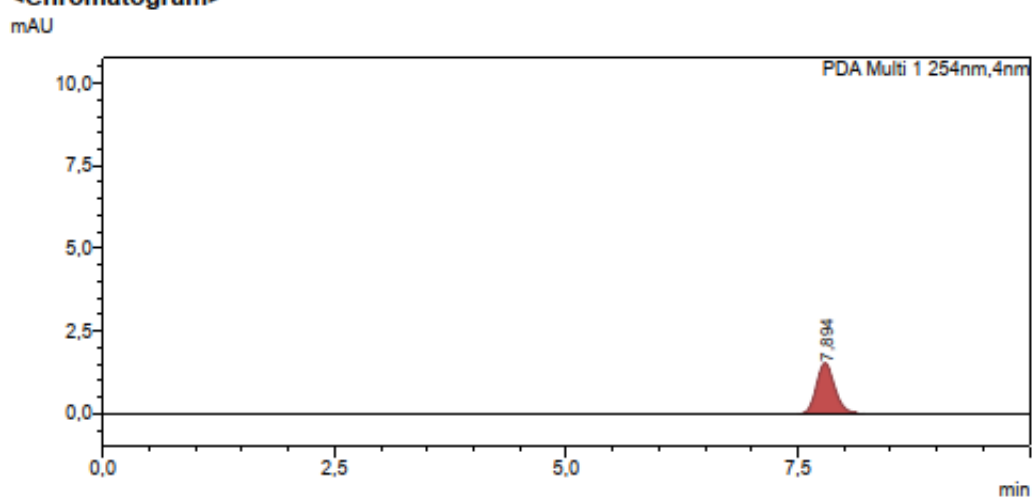


SHIMADZU
LabSolutions

Analysis Report

Sample Name : Asiaticoside
Sample ID : 10ppm asiaticoside
Data Filename : 10ppm asiaticoside (Replication 2)
Method Filename : 101.1.22.lcm
Batch Filename :
Vial # : 1-1
Injection Volume : 20 uL
Date Acquired : 1/12/2022 11:58:10 PM
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PDA Ch1 254nm

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Total		20480	1565	0,000			

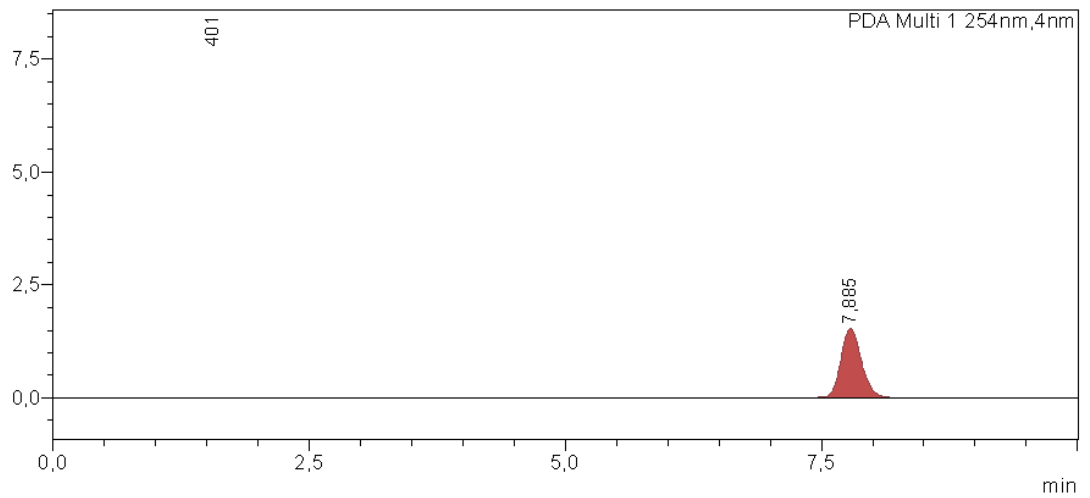
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Sample Name : asiaticoside
 Sample ID : 10ppm asiaticoside
 Data Filename : 10ppm asiaticoside (Replication 3)
 Method Filename : 101.1.22.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 1/13/2022 11:46:27 AM
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Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

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<Peak Table>

PDA Ch1 254nm

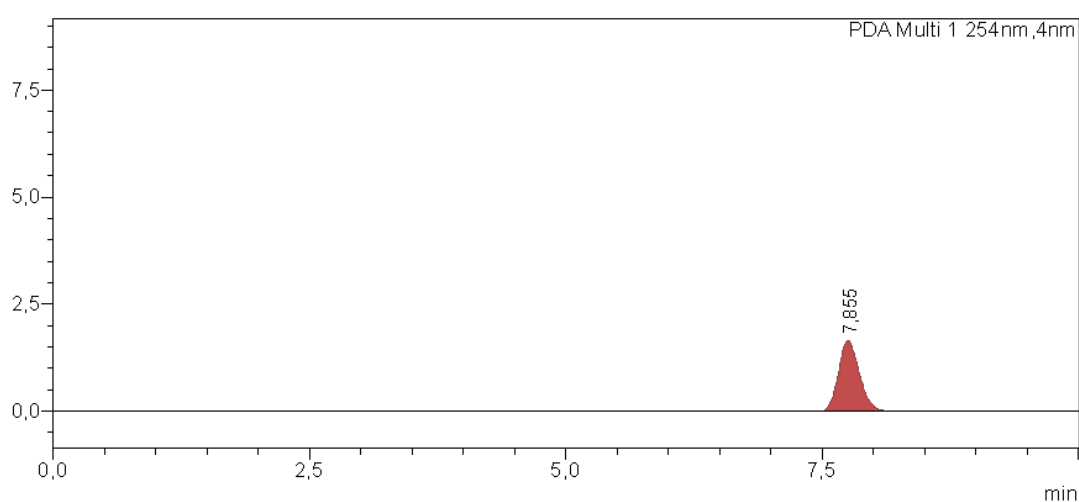
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1	7,885	20500	1641	0,000			Asiaticoside
Total		20500	1641	0,000			

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Sample ID	: 25ppm asiaticoside	Acquired by	: System Administrator
Data Filename	: 25 ppm asiaticoside(Replication 1)	Processed by	: System Administrator
Method Filename	: 12.1.22.lcm		
Batch Filename	:		
Vial #	: 1-1		
Injection Volume	: 20 uL		
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<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
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Total		24546	1671	0,000			



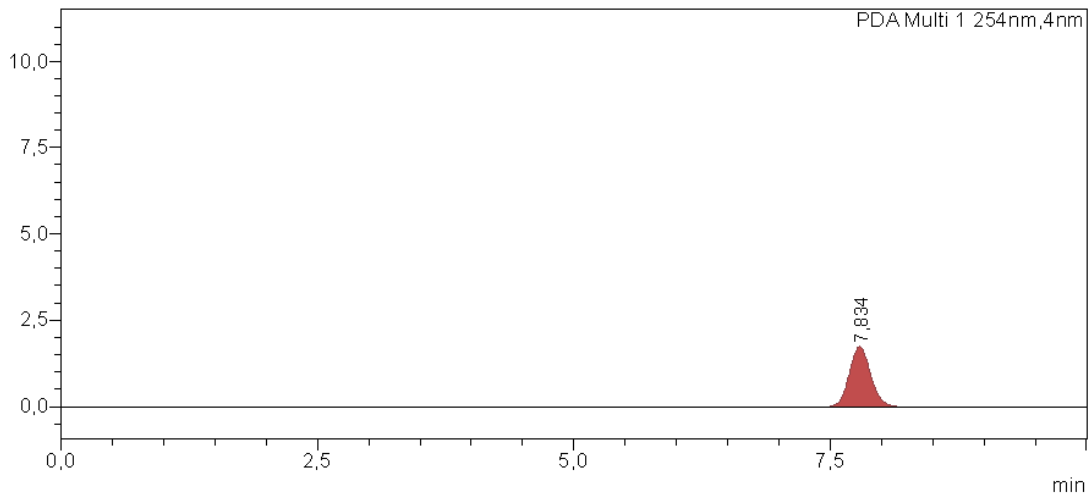
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Batch Filename :
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Injection Volume : 20 uL
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PDA Ch1 254nm

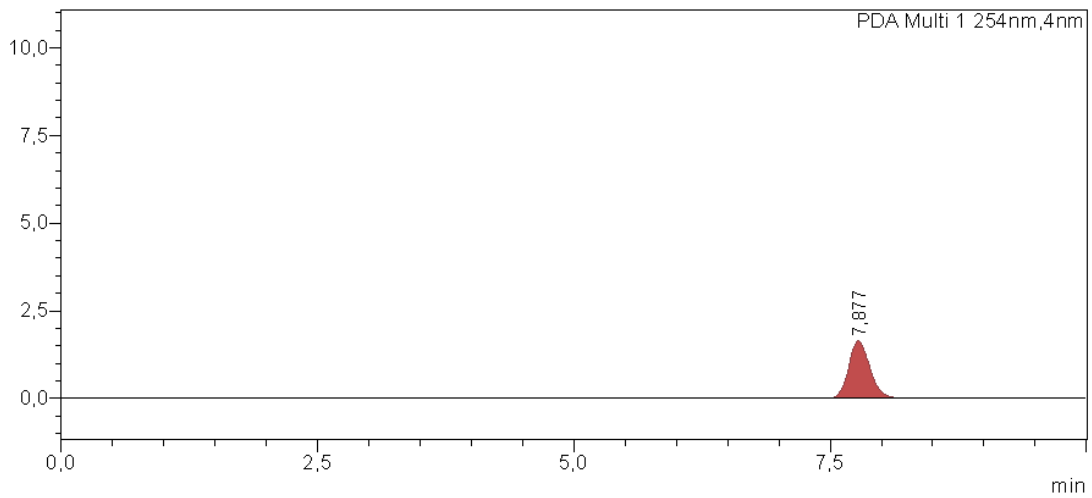
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1	7,834	24961	1750	0,000			Asiaticoside
Total		24961	1750	0,000			

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Data Filename	: 25 ppm asiaticoside(Replication 3)	Processed by	: System Administrator
Method Filename	: 12.1.22.lcm		
Batch Filename	:		
Vial #	: 1-1		
Injection Volume	: 20 uL		
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<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
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Total		24667	1644	0,000			

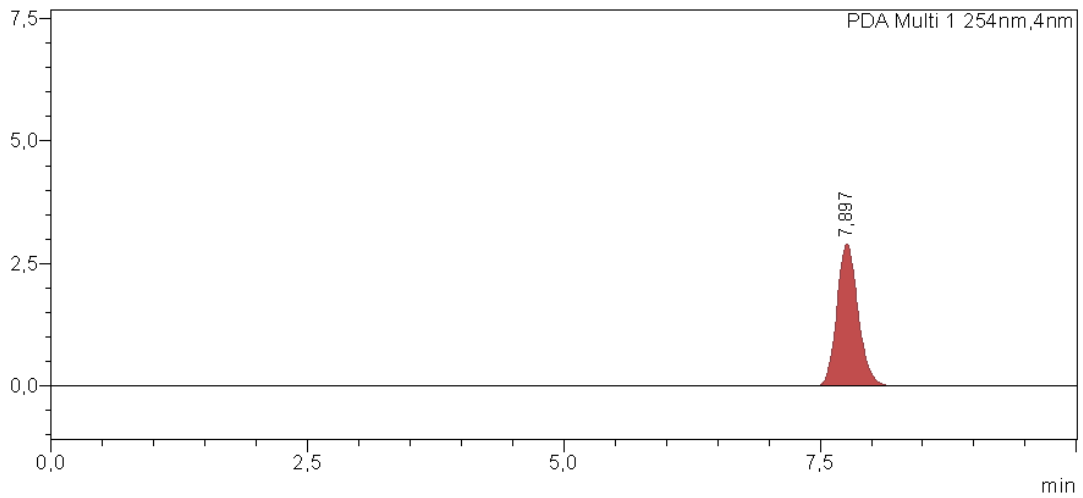


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Batch Filename :
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Injection Volume : 20 uL
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Processed by : System Administrator

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<Peak Table>

PDA Ch1 254nm

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Total		33234	2919	0,000			



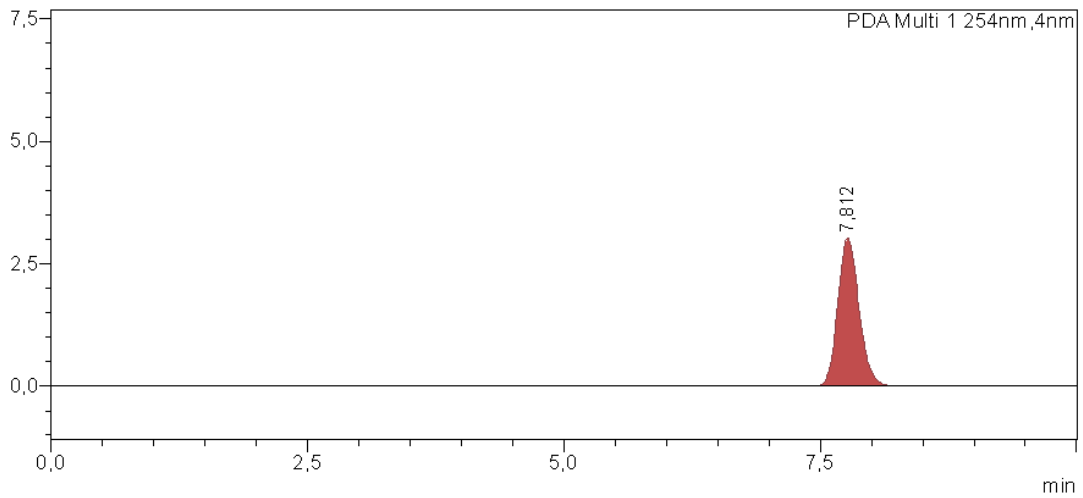
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 Injection Volume : 20 uL
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 Processed by : System Administrator

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<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
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Total		33254	2410	0,000			

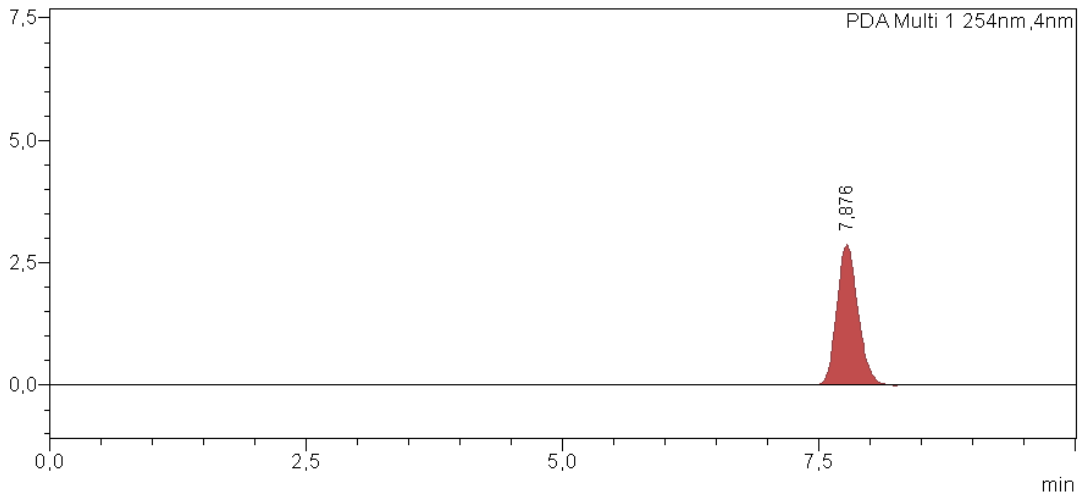


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Batch Filename	:		
Vial #	: 1-1		
Injection Volume	: 20 uL		
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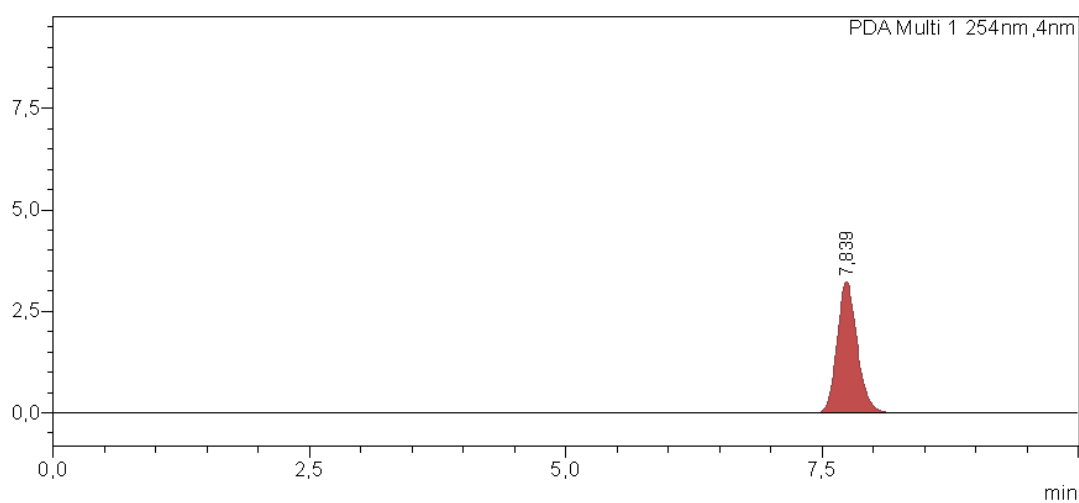
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Total		33217	2320	0,000			

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Sample ID	: 75ppm asiaticoside	Acquired by	: System Administrator
Data Filename	: 75ppm asiaticoside(Replication 1)	Processed by	: System Administrator
Method Filename	: 101.1.22.lcm		
Batch Filename	:		
Vial #	: 1-1		
Injection Volume	: 20 uL		
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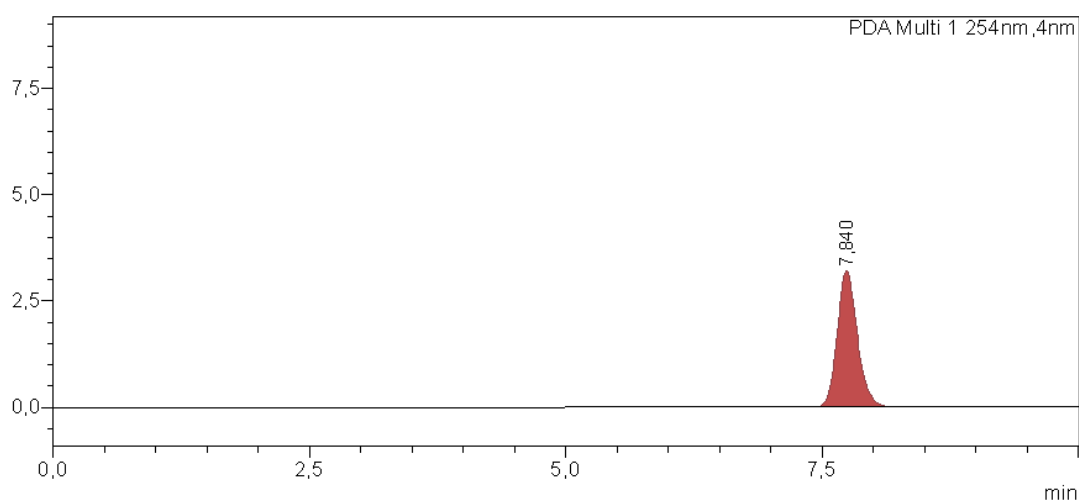
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Total		42806	3233	0,000			

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Data Filename	: 75ppm asiaticoside(Replication 2)	Processed by	: System Administrator
Method Filename	: 101.1.22.lcm		
Batch Filename	:		
Vial #	: 1-1		
Injection Volume	: 20 uL		
Date Acquired	: 1/12/2022 17:28:12 PM		
Date Processed	: 1/12/2022 17:38:12 PM		

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<Peak Table>

PDA Ch1 254nm

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Total		43687	3213	0,000			



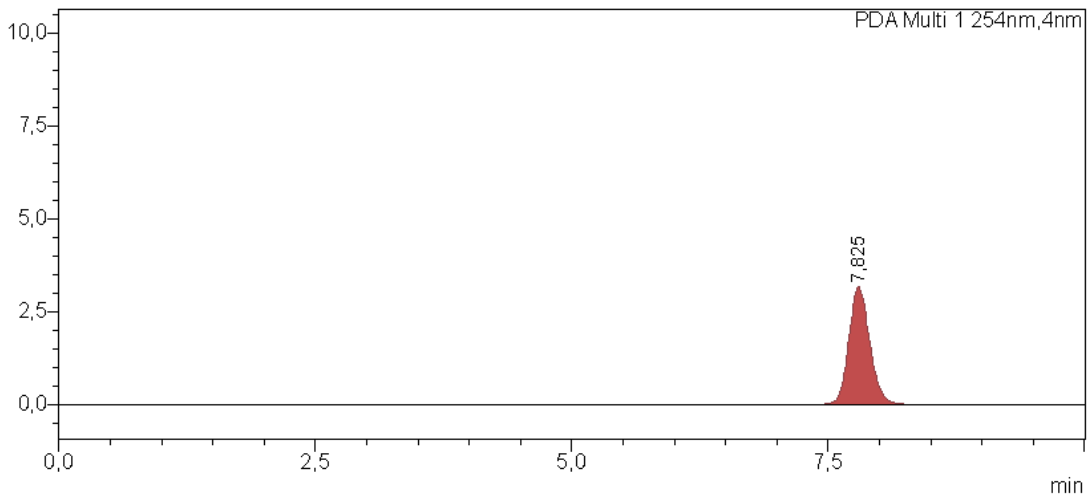
<Sample Information>

Sample Name : Asiaticoside
Sample ID : 75ppm asiaticoside
Data Filename : 75ppm asiaticoside(Replication 3)
Method Filename : 12.1.22.lcm
Batch Filename :
Vial # : 1-1
Injection Volume : 20 uL
Date Acquired : 1/13/2022 17:56:48 PM
Date Processed : 1/13/2022 18:06:48 PM

Sample Type : Unknown
Acquired by : System Administrator
Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	7,824	42646	3143	0,000			Asiaticoside
Total		42646	3143	0,000			

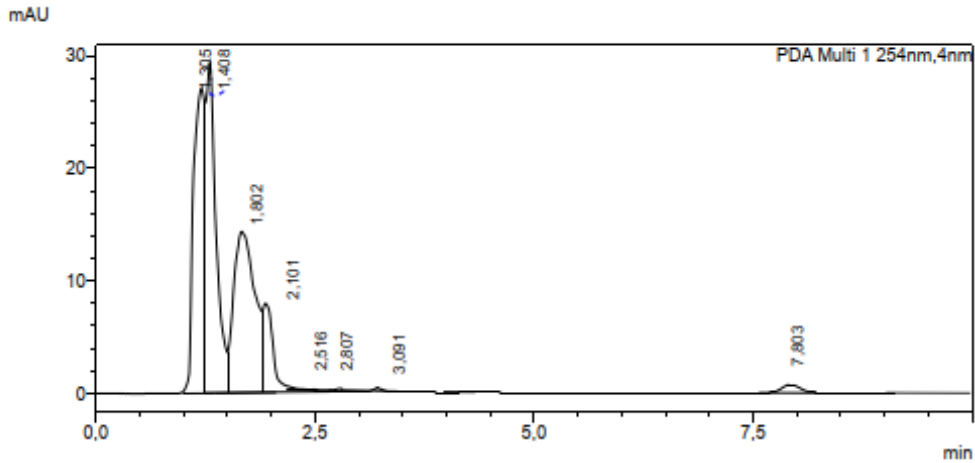
Lampiran 4. Hasil Perhitungan Kromatogram Ekstrak Masing-Masing Variasi Ekstraksi.

SHIMADZU LabSolutions Analysis Report

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi120.75.1
 Data Filename : fraksi120.75.1.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 10:13:18 PM
 Date Processed : 11/17/2022 10:23:20 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>



<Peak Table>

PDA Ch1 254nm

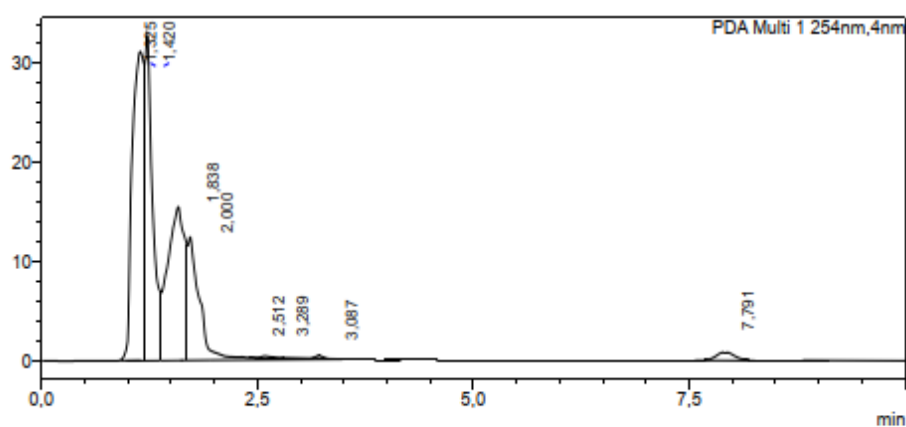
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1.305	267762	27025	0.000			
2	1.408	243587	29298	0.000		V	
3	1.802	266301	14300	0.000		V	
4	2.101	76549	7890	0.000		SV	
5	2.516	2024	169	0.000		T	
6	2.807	1271	141	0.000		TV	
7	3.091	2428	301	0.000			
8	7.803	11063	751	0.000			
Total		870986	79876				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi120.75.2
 Data Filename : fraksi120.75.2.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 10:47:22 PM
 Date Processed : 11/17/2022 10:57:23 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,325	334057	31181	0,000			
2	1,420	247268	32805	0,000		V	
3	1,838	252958	15484	0,000		V	
4	2,000	136531	12397	0,000		SV	
5	2,512	2338	200	0,000		T	
6	3,289	1364	160	0,000		TV	
7	3,087	3052	359	0,000		V	
8	7,791	12752	858	0,000			
Total		990320	93443				



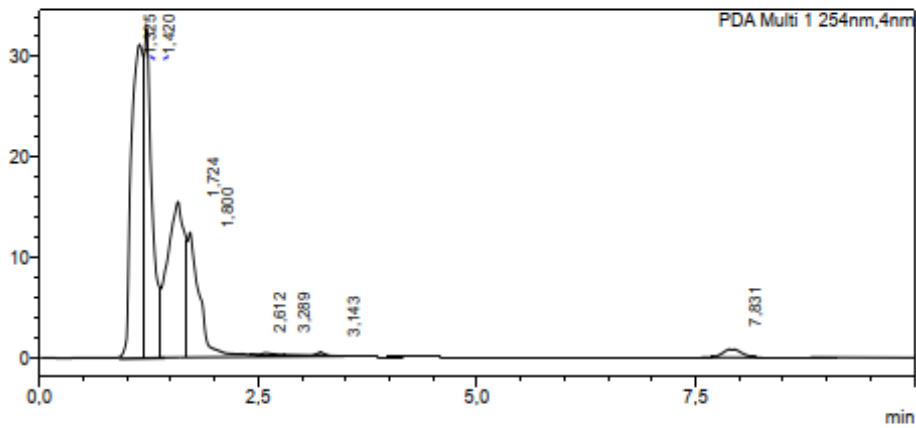
<Sample Information>

Sample Name : sampel fraksi alkohol
Sample ID : fraksi120.75.3
Data Filename : fraksi120.75.3.lcd
Method Filename : 17.03.2022.lcm
Batch Filename :
Vial # : 1-1
Injection Volume : 20 uL
Date Acquired : 11/17/2022 11:07:22 PM
Date Processed : 11/17/2022 11:17:23 PM

Sample Type : Unknown
Acquired by : System Administrator
Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,325	334057	31181	0,000			
2	1,420	247268	32805	0,000		V	
3	1,724	252958	15484	0,000		V	
4	1,800	138531	12397	0,000		SV	
5	2,612	2338	200	0,000		T	
6	3,289	1364	160	0,000		TV	
7	3,143	3052	359	0,000		V	
8	7,831	12441	858	0,000			
Total		990320	93443				

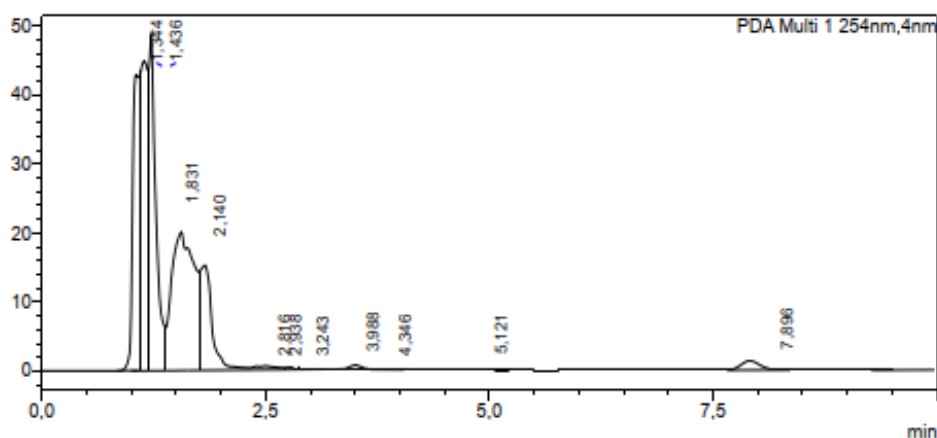


<Sample Information>

Sample Name	: sampel fraksi alkohol	Sample Type	: Unknown
Sample ID	: fraksi150.75.1	Acquired by	: System Administrator
Data Filename	: fraksi150.75.1.lcd	Processed by	: System Administrator
Method Filename	: 17.03.2022.lcm		
Batch Filename	:		
Vial #	: 1-1		
Injection Volume	: 20 uL		
Date Acquired	: 11/17/2022 11:45:12 AM		
Date Processed	: 11/17/2022 11:55:12 AM		

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

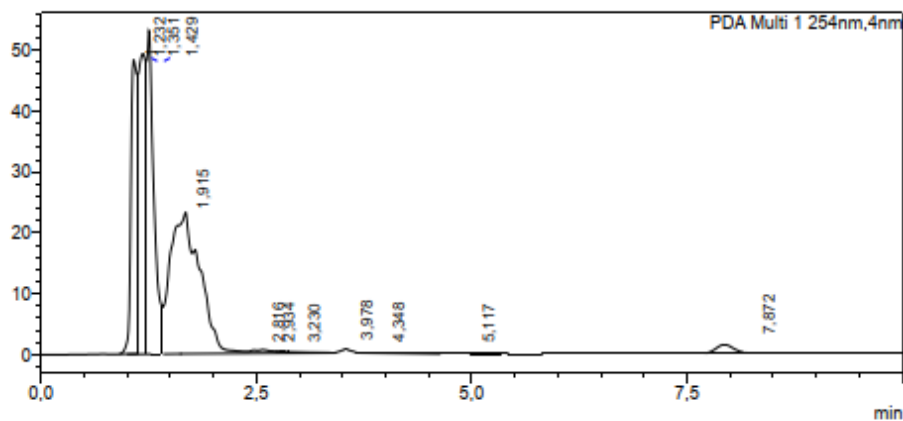
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,344	566304	44894	0,000			
2	1,436	315874	48725	0,000		V	
3	1,831	406082	20018	0,000		V	
4	2,140	170471	15152	0,000		V	
5	2,816	3543	434	0,000		V	
6	2,938	6228	487	0,000		V	
7	3,243	2034	259	0,000		V	
8	3,988	4977	554	0,000			
9	4,346	2339	203	0,000			
10	5,121	2852	157	0,000			
11	7,896	20110	1355	0,000			
Total		1500813	132237				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi150.75.2
 Data Filename : fraksi150.75.2.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 12:35:37 AM
 Date Processed : 11/17/2022 12:45:38 AM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

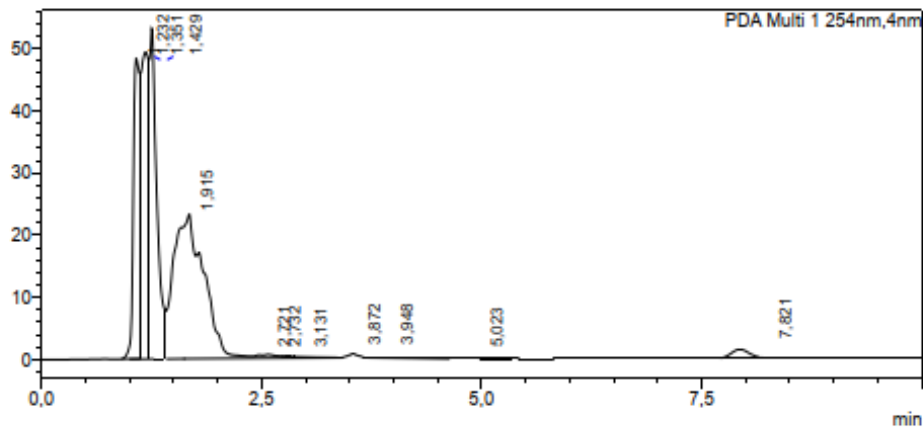
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,232	278744	48227	0,000			
2	1,351	338888	49282	0,000		V	
3	1,429	339914	53083	0,000		V	
4	1,915	635618	23131	0,000		SV	
5	2,816	1392	236	0,000		T	
6	2,934	3614	342	0,000		TV	
7	3,230	1650	201	0,000		TV	
8	3,978	6613	587	0,000			
9	4,348	3252	247	0,000		V	
10	5,117	3052	170	0,000			
11	7,872	22265	1493	0,000			
Total		1635004	176999				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi150.75.3
 Data Filename : fraksi150.75.3.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 12:35:37 AM
 Date Processed : 11/17/2022 12:45:38 AM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

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<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1.232	278712	48786	0.000			
2	1.351	338321	49241	0.000		V	
3	1.429	339534	53874	0.000		V	
4	1.915	635231	23121	0.000		SV	
5	2.721	1321	242	0.000		T	
6	2.732	3612	354	0.000		TV	
7	3.131	1665	212	0.000		TV	
8	3.872	6678	543	0.000			
9	3.948	3142	254	0.000		V	
10	5.023	3087	174	0.000			
11	7.821	22341	1467	0.000			
Total		1633644	178268				

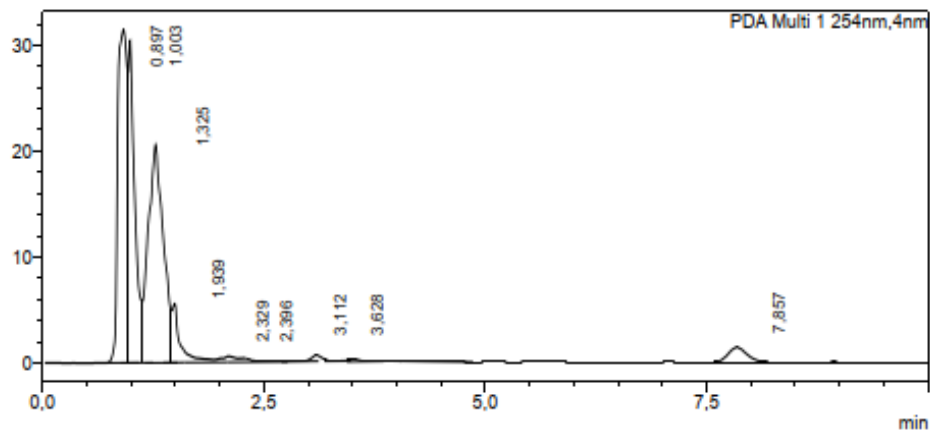
<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi180.60.1
 Data Filename : fraksi180.60.1.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 µL
 Date Acquired : 11/17/2022 13:05:37 PM
 Date Processed : 11/17/2022 13:15:38 PM

Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0.897	331255	31442	0,000			
2	1.003	234555	30382	0,000		V	
3	1.325	358432	20500	0,000		V	
4	1.939	48877	5498	0,000		V	
5	2.329	8070	477	0,000		V	
6	2.396	2942	286	0,000		V	
7	3.112	4780	531	0,000			
8	3.628	2902	235	0,000		V	
9	7.857	21335	1400	0,000			
Total		1013130	90752				

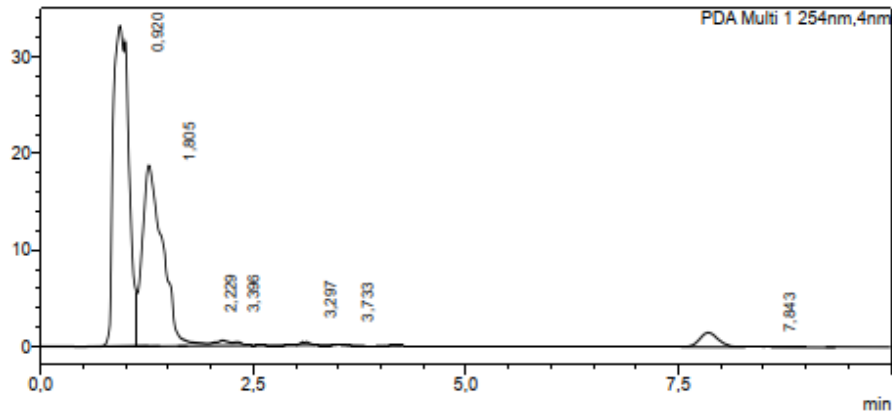
<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi180.60.2
 Data Filename : fraksi180.60.2.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 13:33:42 PM
 Date Processed : 11/17/2022 13:43:43 PM

Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0,920	598166	33198	0,000			
2	1,805	438416	18695	0,000		SV	
3	2,229	4834	381	0,000		T	
4	3,396	2520	244	0,000		TV	
5	3,297	3089	397	0,000			
6	3,733	1827	196	0,000			
7	7,843	22864	1489	0,000			
Total		1071715	54599				



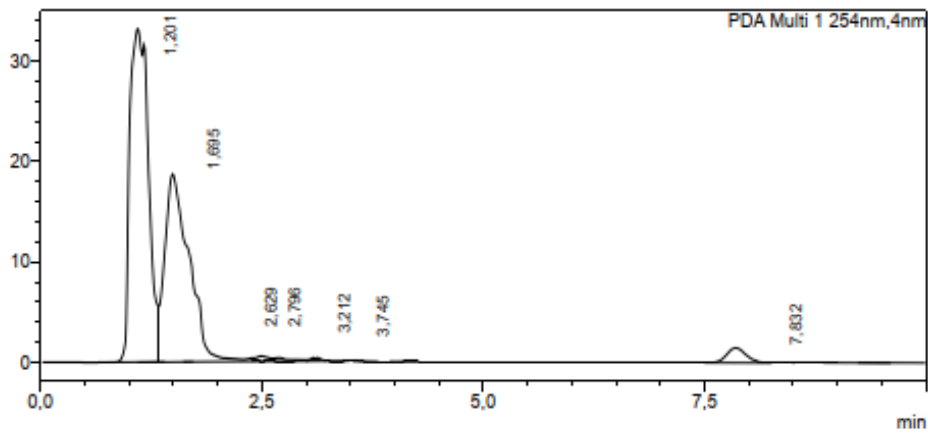
<Sample Information>

Sample Name : sampel fraksi alkohol
Sample ID : fraksi180.60.3
Data Filename : fraksi180.60.3.lcd
Method Filename : 17.03.2022.lcm
Batch Filename :
Vial # : 1-1
Injection Volume : 20 uL
Date Acquired : 11/17/2022 14:12:42 PM
Date Processed : 11/17/2022 14:22:43 PM

Sample Type : Unknown
Acquired by : System Administrator
Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,201	593432	33432	0,000			
2	1,695	438875	18342	0,000		SV	
3	2,629	4142	332	0,000		T	
4	2,796	2874	212	0,000		TV	
5	3,212	3788	365	0,000			
6	3,745	1765	165	0,000			
7	7,832	22393	1476	0,000			
Total		1067269	54326				

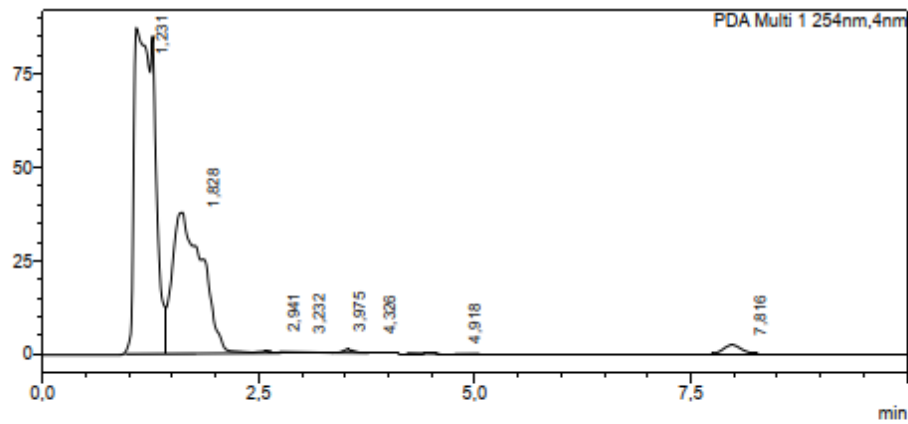
<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi120.60.1
 Data Filename : fraksi120.60.1.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 7:52:27 PM
 Date Processed : 11/17/2022 8:02:28 PM

Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

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<Peak Table>

PDA Ch1 254nm

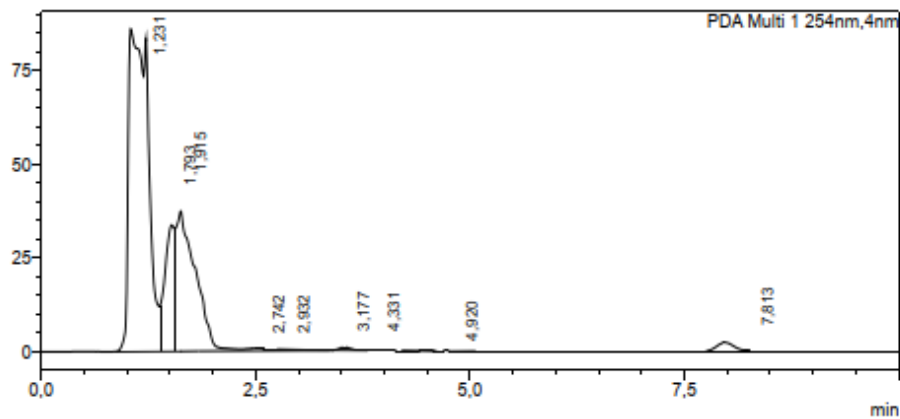
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,231	1626430	87058	0,000			
2	1,828	1054290	37816	0,000		SV	
3	2,941	5531	495	0,000		T	
4	3,232	1869	188	0,000		TV	
5	3,975	8433	915	0,000			
6	4,326	2650	242	0,000			
7	4,918	1192	152	0,000			
8	7,816	36003	2438	0,000			
Total		2736399	129304				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi120.60.2
 Data Filename : fraksi120.60.2.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 8:21:37 PM
 Date Processed : 11/17/2022 8:31:38 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

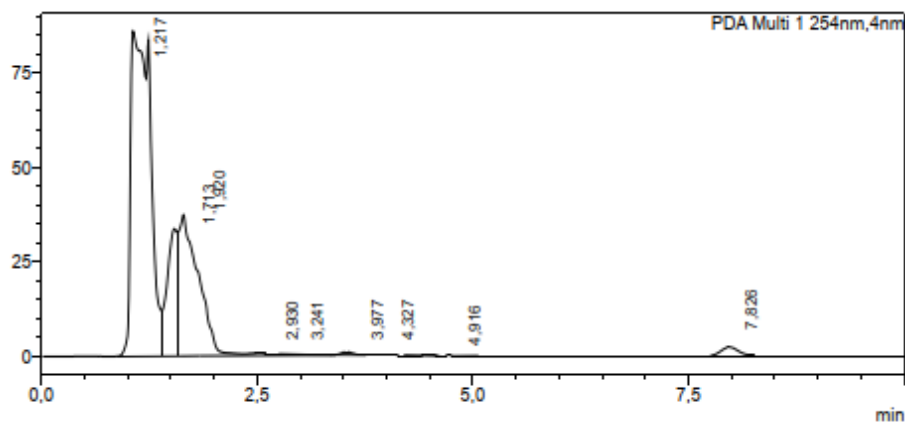
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1.231	1602601	86066	0.000			
2	1.793	323689	33698	0.000		V	
3	1.915	698289	37349	0.000		SV	
4	2.742	5168	480	0.000		T	
5	2.932	1907	187	0.000		TV	
6	3.177	8176	890	0.000			
7	4.331	2587	228	0.000			
8	4.920	1191	151	0.000			
9	7.813	35379	2396	0.000			
Total		2678967	161447				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi120.60.3
 Data Filename : fraksi120.60.3.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 9:05:37 PM
 Date Processed : 11/17/2022 9:15:38 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

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<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,217	1603171	86243	0,000			
2	1,713	324189	33677	0,000		V	
3	1,920	697919	37298	0,000		SV	
4	2,930	5175	479	0,000		T	
5	3,241	1915	178	0,000		TV	
6	3,977	8147	889	0,000			
7	4,327	2534	231	0,000			
8	4,916	1185	147	0,000			
9	7,826	35755	2393	0,000			
Total		2679990	161535				

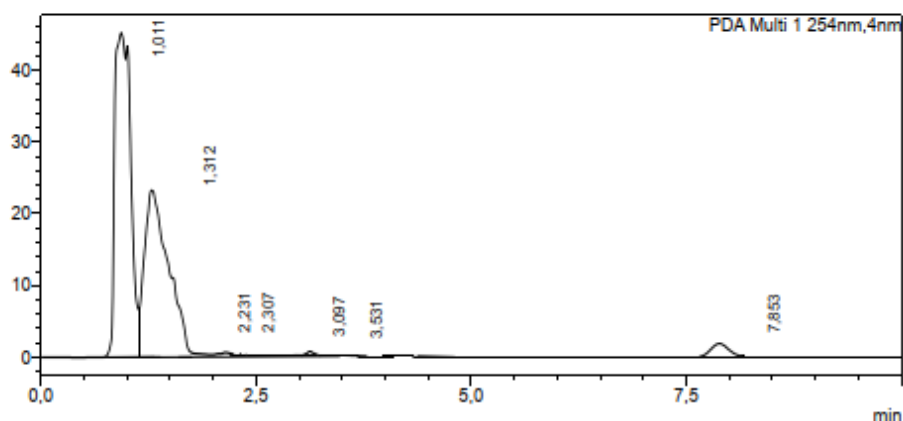
<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi180.68.1
 Data Filename : fraksi180.68.1.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 15:12:51 PM
 Date Processed : 11/17/2022 15:22:52 PM

Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

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<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,011	822475	45143	0,000			
2	1,312	649945	23173	0,000		SV	
3	2,231	3953	381	0,000		TV	
4	2,307	1771	189	0,000		TV	
5	3,097	4222	528	0,000			
6	3,531	1856	191	0,000			
7	7,853	28742	1901	0,000			
Total		1512965	71507				

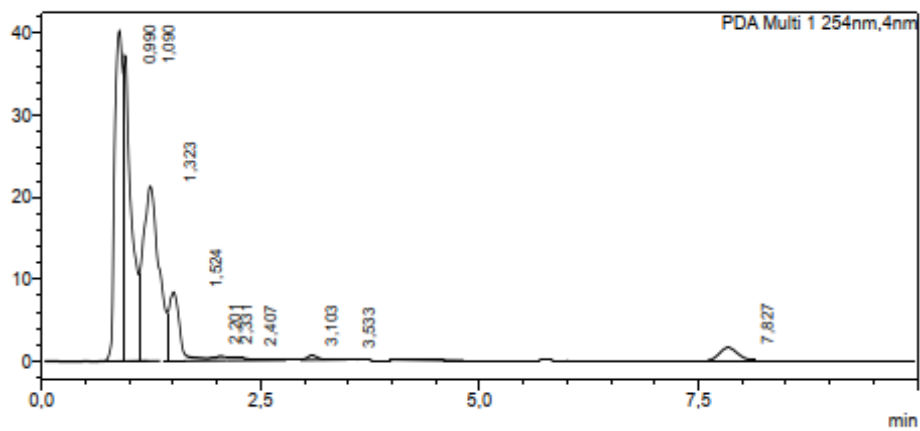
<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi180.68.2
 Data Filename : fraksi180.68.2.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 16:08:44 PM
 Date Processed : 11/17/2022 16:18:46 PM

Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

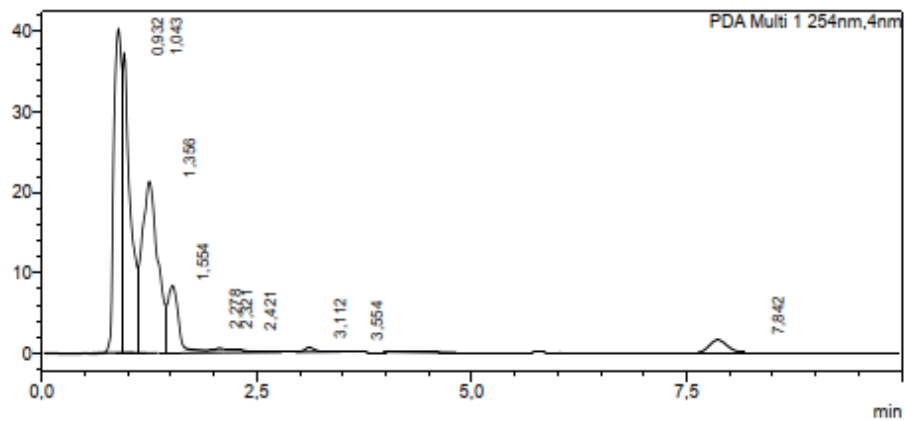
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0.990	378468	40241	0,000			
2	1.090	343017	37228	0,000		V	
3	1.323	410442	21259	0,000		V	
4	1.524	107353	8297	0,000		V	
5	2.201	2535	307	0,000		V	
6	2.331	8029	446	0,000		V	
7	2.407	1622	232	0,000		V	
8	3.103	4245	486	0,000			
9	3.533	2227	192	0,000		V	
10	7.827	24294	1620	0,000			
Total		1280233	110306				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi180.68.3
 Data Filename : fraksi180.68.3.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/17/2022 17:13:44 PM
 Date Processed : 11/17/2022 17:23:46 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

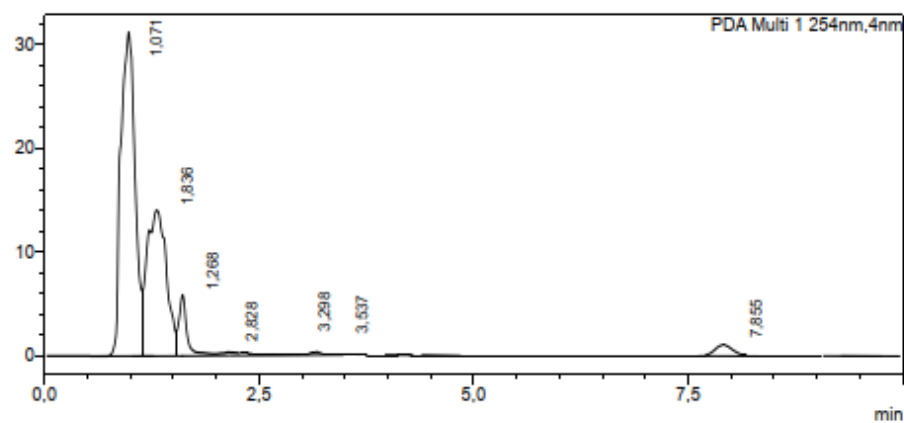
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0.932	378623	40453	0,000			
2	1.043	343878	37132	0,000		V	
3	1.356	410132	21431	0,000		V	
4	1.554	107987	8265	0,000		V	
5	2.278	2587	334	0,000		V	
6	2.321	6009	467	0,000		V	
7	2.421	1618	243	0,000		V	
8	3.112	4221	434	0,000			
9	3.554	2276	134	0,000		V	
10	7.842	26846	1634	0,000			
Total		1284175	120527				

<Sample Information>

Sample Name	: sampel fraksi alkohol	Sample Type	: Unknown
Sample ID	: fraksi120.68.1	Acquired by	: System Administrator
Data Filename	: fraksi120.68.1.lcd	Processed by	: System Administrator
Method Filename	: 17.03.2022.lcm		
Batch Filename	:		
Vial #	: 1-1		
Injection Volume	: 20 uL		
Date Acquired	: 11/18/2022 7:12:50 PM		
Date Processed	: 11/18/2022 7:22:51 PM		

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

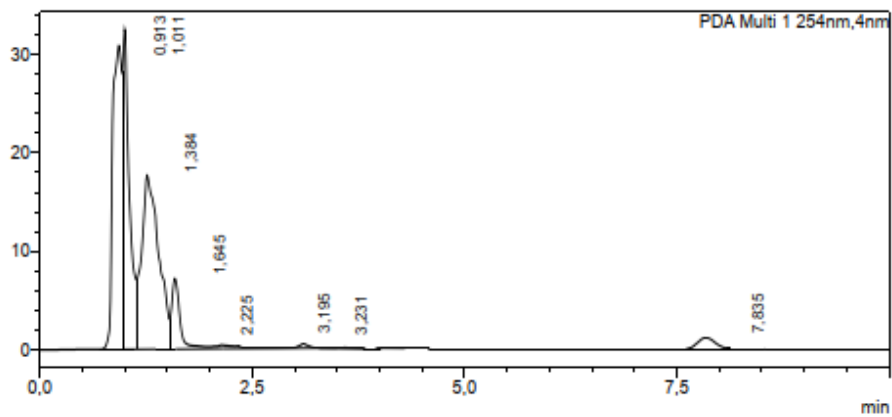
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,071	515983	31158	0,000			
2	1,836	314783	14025	0,000		V	
3	1,268	54801	5816	0,000		V	
4	2,828	6912	277	0,000		V	
5	3,298	2566	327	0,000			
6	3,537	1298	131	0,000			
7	7,855	16371	1085	0,000			
Total		912715	52819				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi120.68.2
 Data Filename : fraksi120.68.2.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 8:25:41 PM
 Date Processed : 11/18/2022 8:35:42 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0,913	318789	30796	0,000			
2	1,011	251516	32471	0,000		V	
3	1,384	353754	17590	0,000		V	
4	1,645	68070	7106	0,000		V	
5	2,225	7598	312	0,000		V	
6	3,195	3180	368	0,000			
7	3,231	2234	178	0,000		V	
8	7,835	18135	1210	0,000			
Total		1023275	90033				



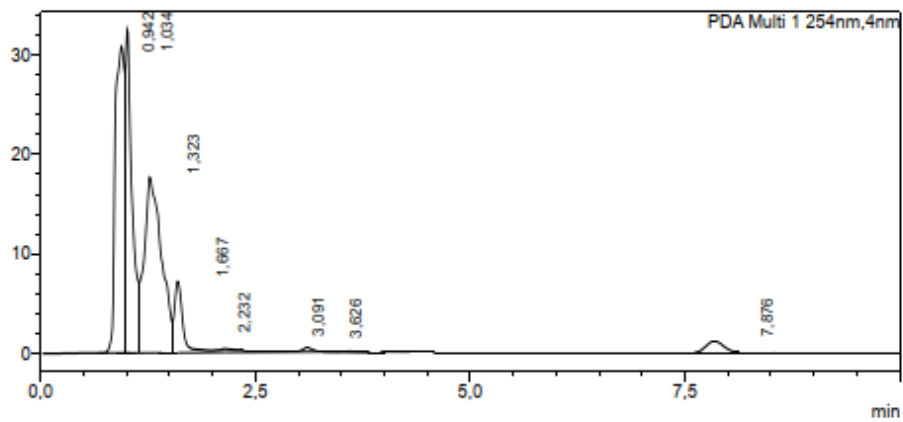
<Sample Information>

Sample Name : sampel fraksi alkohol
Sample ID : fraksi120.68.3
Data Filename : fraksi120.68.3.lcd
Method Filename : 17.03.2022.lcm
Batch Filename :
Vial # : 1-1
Injection Volume : 20 uL
Date Acquired : 11/18/2022 9:03:41 PM
Date Processed : 11/18/2022 9:13:42 PM

Sample Type : Unknown
Acquired by : System Administrator
Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

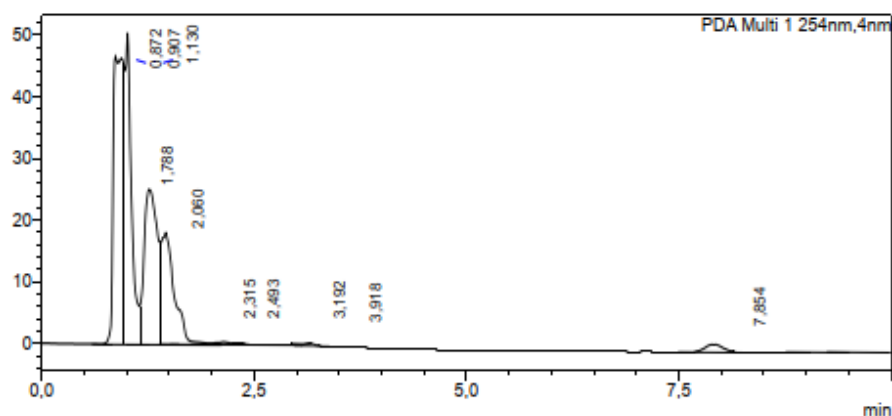
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	1,042	318253	30832	0,000			
2	1,334	251982	32489	0,000		V	
3	1,523	353256	17478	0,000		V	
4	1,867	68376	7136	0,000		V	
5	2,532	7525	387	0,000		V	
6	3,691	3176	345	0,000			
7	4,026	2298	198	0,000		V	
8	7,876	18506	1245	0,000			
Total		1023372	90110				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi180.75.1
 Data Filename : fraksi180.75.1.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 10:19:11 AM
 Date Processed : 11/18/2022 10:29:12 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

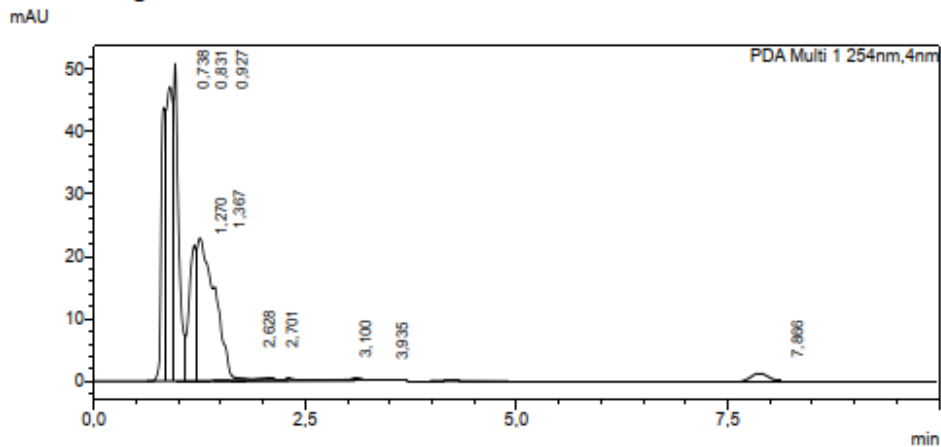
PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0.872	257699	46702	0.000			
2	0.907	321977	46386	0.000		V	
3	1.130	337838	50536	0.000		V	
4	1.788	393155	25147	0.000		V	
5	2.060	277450	18146	0.000		SV	
6	2.315	2960	288	0.000		TV	
7	2.493	1984	232	0.000		TV	
8	3.192	3474	438	0.000			
9	3.918	1279	139	0.000			
10	7.854	20057	1323	0.000			
Total		1617874	189338				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi180.75.2
 Data Filename : fraksi180.75.2.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 11:11:55 PM
 Date Processed : 11/18/2022 11:21:58 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>



<Peak Table>

PDA Ch1 254nm

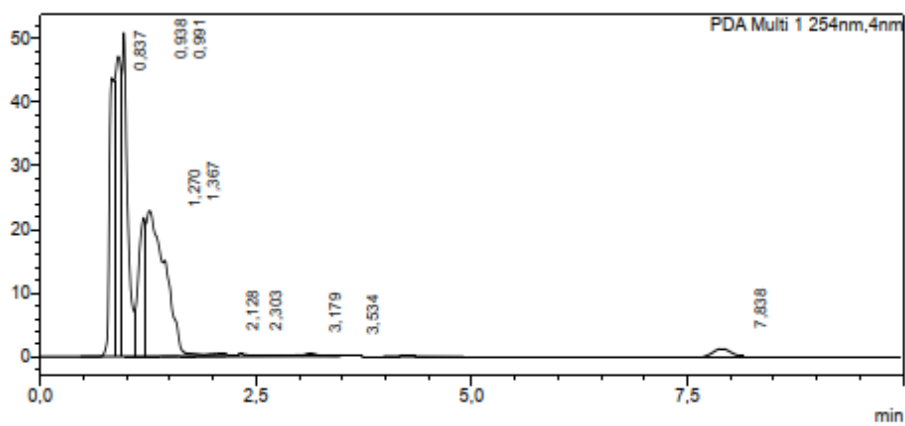
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0,738	225520	43800	0,000			
2	0,831	378856	47136	0,000		V	
3	0,927	312101	50951	0,000		V	
4	1,270	186333	21743	0,000		V	
5	1,367	509846	22855	0,000		SV	
6	2,628	2968	299	0,000		TV	
7	2,701	2131	240	0,000		TV	
8	3,100	4538	484	0,000		V	
9	3,935	2986	211	0,000		V	
10	7,866	20603	1359	0,000			
Total		1645880	189078				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi180.75.3
 Data Filename : fraksi180.75.3.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 12:21:55 PM
 Date Processed : 11/18/2022 12:31:56 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

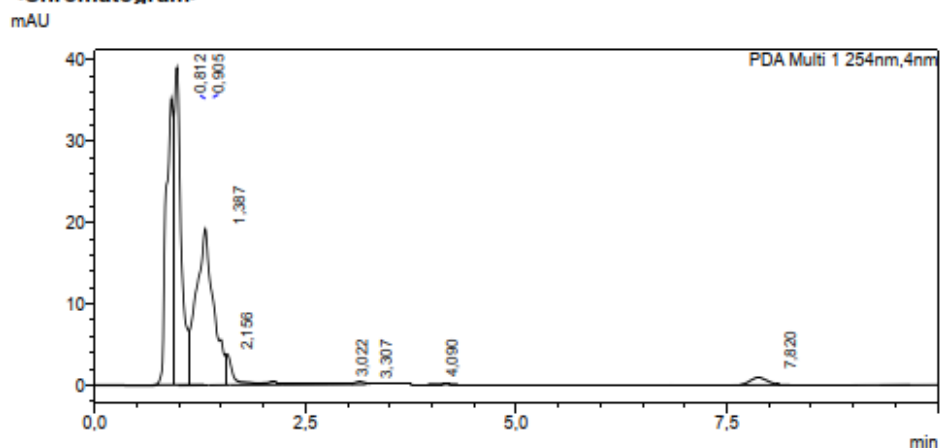
PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0.837	225253	43134	0.000			
2	0.938	378126	47456	0.000		V	
3	0.991	312874	50762	0.000		V	
4	1.270	186345	21165	0.000		V	
5	1.367	509897	22265	0.000		SV	
6	2.128	2912	226	0.000		TV	
7	2.303	2134	287	0.000		TV	
8	3.179	4561	417	0.000		V	
9	3.534	2978	213	0.000		V	
10	8.868	20660	1367	0.000			
Total		1646740	187292				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi150.60.1
 Data Filename : fraksi150.60.1.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 13:14:23 PM
 Date Processed : 11/18/2022 13:24:24 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>



<Peak Table>

PDA Ch1 254nm

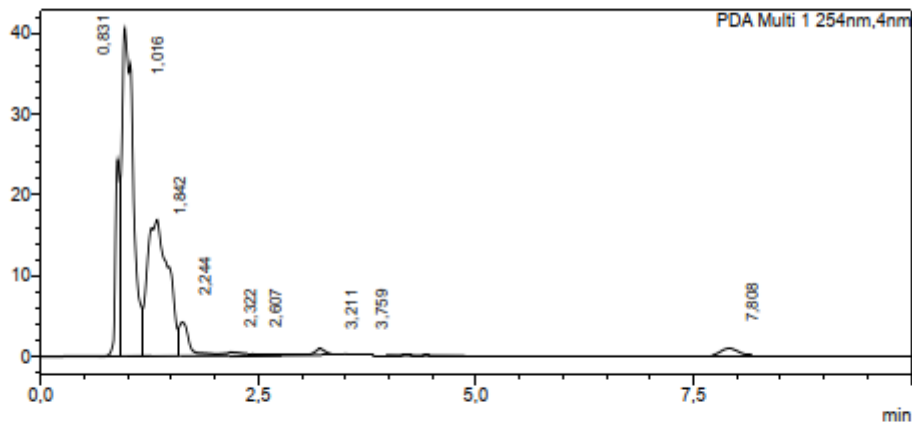
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0,812	311171	35257	0,000			
2	0,905	308439	39078	0,000		V	
3	1,387	388990	19212	0,000		V	
4	2,156	32521	3749	0,000		V	
5	3,022	5792	342	0,000		V	
6	3,307	1457	174	0,000		V	
7	4,090	2624	328	0,000			
8	7,820	13755	929	0,000			
Total		1064750	99067				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi150.60.2
 Data Filename : fraksi150.60.2.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 14:05:33 PM
 Date Processed : 11/18/2022 14:15:34 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0,831	122886	24307	0,000			
2	1,016	497772	40559	0,000		V	
3	1,842	385992	16806	0,000		V	
4	2,244	47394	4124	0,000		V	
5	2,322	6659	382	0,000		V	
6	2,607	1542	193	0,000		V	
7	3,211	7378	751	0,000		V	
8	3,759	3897	274	0,000		V	
9	7,808	14209	954	0,000			
Total		1087730	88329				



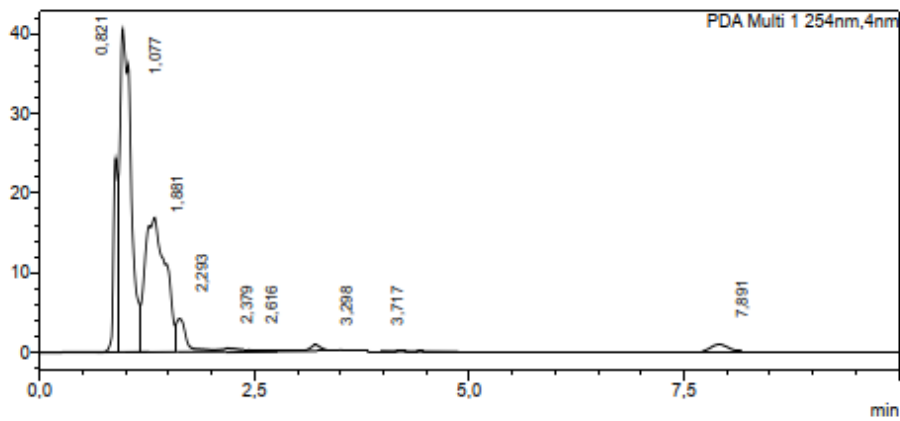
<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi150.60.3
 Data Filename : fraksi150.60.3.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 15:08:33 PM
 Date Processed : 11/18/2022 15:18:34 PM

Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

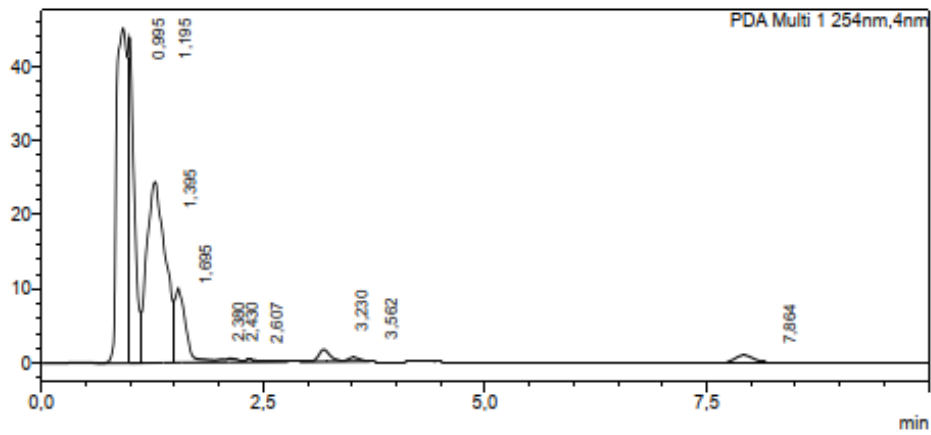
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0,821	122176	24331	0,000			
2	1,077	497476	40145	0,000		V	
3	1,881	385129	16763	0,000		V	
4	2,293	47863	4187	0,000		V	
5	2,379	6541	329	0,000		V	
6	2,616	1598	185	0,000		V	
7	3,298	7318	769	0,000		V	
8	3,717	3887	289	0,000		V	
9	7,891	14663	954	0,000			
Total		1086651	87952				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi150.68.1
 Data Filename : fraksi150.68.1.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 16:12:12 PM
 Date Processed : 11/18/2022 16:22:12 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

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<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0,995	512915	45081	0,000			
2	1,198	307141	43898	0,000		V	
3	1,395	507029	24322	0,000		V	
4	1,695	124199	9958	0,000		V	
5	2,380	2869	306	0,000		V	
6	2,430	5249	427	0,000		V	
7	2,607	2492	263	0,000		V	
8	3,230	15796	1656	0,000		V	
9	3,562	6825	626	0,000		V	
10	7,864	15132	1012	0,000			
Total		1499647	127551				

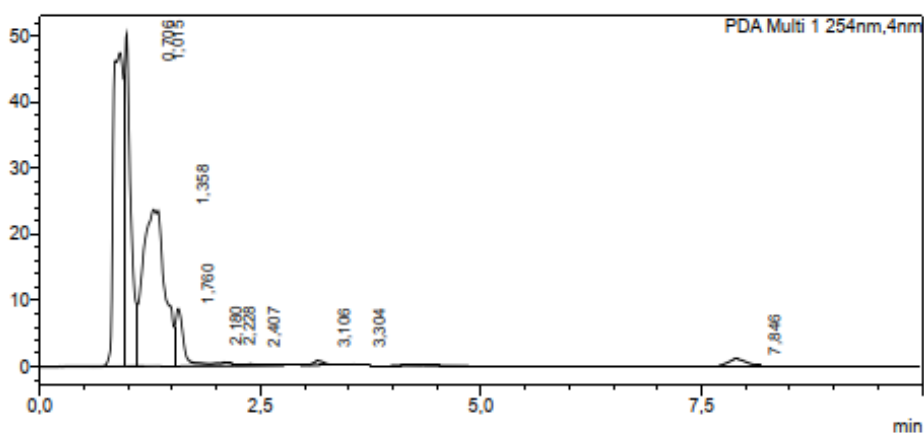
<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi150.68.2
 Data Filename : fraksi150.68.2.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 17:16:33 PM
 Date Processed : 11/18/2022 17:26:34 PM

Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU



<Peak Table>

PDA Ch1 254nm

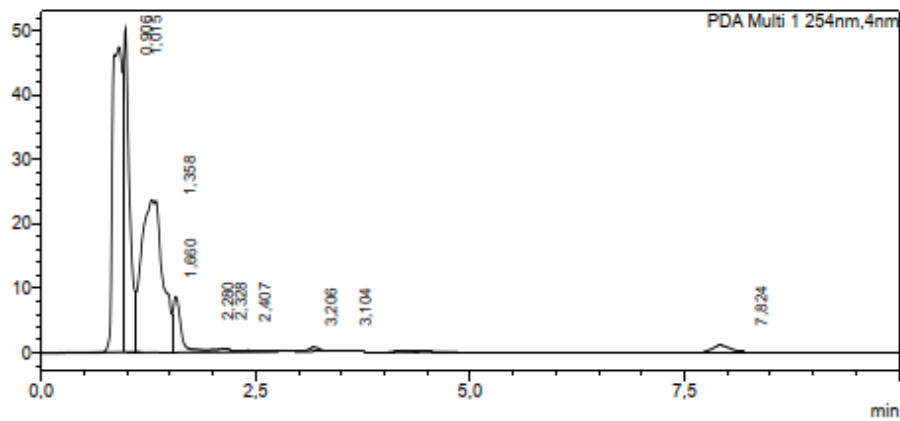
Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0.708	548994	47344	0.000			
2	1.015	342543	50178	0.000		V	
3	1.358	582825	23619	0.000		V	
4	1.760	77916	8576	0.000		V	
5	2.180	3151	323	0.000		V	
6	2.228	4682	449	0.000		V	
7	2.407	2719	257	0.000		V	
8	3.106	6653	692	0.000		V	
9	3.304	2894	209	0.000		V	
10	7.846	15844	1045	0.000			
Total		1586220	132693				

<Sample Information>

Sample Name : sampel fraksi alkohol
 Sample ID : fraksi150.68.3
 Data Filename : fraksi150.68.lcd
 Method Filename : 17.03.2022.lcm
 Batch Filename :
 Vial # : 1-1
 Injection Volume : 20 uL
 Date Acquired : 11/18/2022 17:16:33 PM
 Date Processed : 11/18/2022 17:26:34 PM
 Sample Type : Unknown
 Acquired by : System Administrator
 Processed by : System Administrator

<Chromatogram>

mAU





















<Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Area	Height	Conc.	Unit	Mark	Name
1	0.908	548572	47345	0.000			
2	1.015	342156	50187	0.000		V	
3	1.358	582987	23812	0.000		V	
4	1.660	77267	8587	0.000		V	
5	2.280	3167	343	0.000		V	
6	2.328	4678	443	0.000		V	
7	2.407	2726	278	0.000		V	
8	3.206	6697	693	0.000		V	
9	3.104	2848	207	0.000		V	
10	7.824	14844	1034	0.000			
Total		1583942	132286				


Lampiran 5. Berat Ekstrak Variasi Maserasi

Waktu	Suhu	Cawan kosong	Cawan Isi	Bobot akhir (g)
120	75			0,5332
150	75			0,4846
180	60			0,3552
120	60			0,3318
180	68			0,4838

120	68			0,4773
180	75			0,3453
150	60			0,4330
150	68			0,3859

Lampiran 6. Hasil Determinasi Tanaman

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET DAN TEKNOLOGI

 UNIVERSITAS NEGERI MAKASSAR (UNM)
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
LABORATORIUM BIOLOGI
Alamat : Kampus UNM Parangtambung J. Mallengkeri, Makassar 90224
Tlp. (0411) 840610 Fax. (0411) 841504
Laman : <http://bio.fmipa.unm.ac.id>

29 Desember 2021

No : 86/UN36.1.4/LAB.BIO/SKAP/2021
Lamp : -
Hal : Hasil Identifikasi Tanaman

Kepada Yth.
Dr. Sujud Zainur Rosyid
Program Studi Farmasi
STIFA Makassar

Dengan Hormat,
Bersama ini, kami sampaikan hasil identifikasi Tanaman yang saudara kirimkan. Identifikasi dilakukan oleh staf peneliti laboratorium Botani Jurusan Biologi FMIPA UNM dengan hasil sebagai berikut:

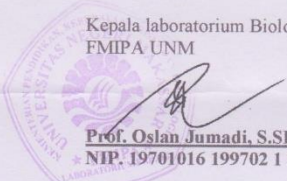
Kingdom : Plantae
Divisi : Magnoliophyta
Kelas : Magnoliopsida
Ordo : Apiales
Famili : Apiaceae
Genus : Centella
Spesies : *Centella asiatica* (L.) Urb.

Kunci determinasi : 1a – 2a – 3a – 4a – Group I – 1b – 3b – 5b – 10b – 11b – 12b – 13b – 27a – 28a –
Fam. Apiaceae – Centella – *Centella asiatica* (L.) Urb.

Sumber pustaka :

1. <http://plantamor.com/species/info/centella/asiatica>
2. <https://www.cabi.org/isc/datasheet/12048>
3. <https://www.gbif.org/species/3034128>
4. <https://www.invasive.org/browse/subinfo.cfm?sub=13316>
5. <https://www.nparks.gov.sg/florafaunaweb/flora/5/3/5347>
6. Steenis, Van C.G.G.J. 2013. Flora. PT. Balai Pustaka, Jakarta

Demikian untuk diketahui dan dipergunakan sebagaimana mestinya.


Kepala laboratorium Biologi
FMIPA UNM
Prof. Oslan Jumadi, S.SI., M.Phil., Ph.D
NIP. 19701016 199702 1 001

Lampiran 7. Cara Perhitungan Kadar Asiaticosida (ppm) dari AUC

Persamaan kurva kalibrasi sebagai berikut :

$$y = 348,36x + 16433$$

$$x = \frac{y-16433}{348,36}$$

y = AUC (luas area)

x = konsentrasi asiaticosida (ppm)

contoh

Pada suhu 60 waktu 120 menit nilai AUC nya adalah 36003, berapakah konsentrasi asiaticosida ?

$$\begin{aligned}x &= \frac{36003-16433}{348,36} \\ &= 56,18 \text{ ppm}\end{aligned}$$

Lampiran 8. Cara Perhitungan Kadar Asiaticosida (%)

$$Kadar (\%) = \frac{K \times V \times fK}{B} \times 100\%$$

K : Konsentrasi (ppm)

V : Volume larutan ekstrak

fK : Fator pengenceran

B : Bobot ekstraks

Contoh

Pada suhu 60 waktu 120 menit, konsentrasi asiaticosida 56,18 ppm jika dikonversi ke % menjadi ?

$$Kadar (\%) = \frac{\frac{56,18 (\mu g)}{1000} \times 5 (ml) \times 1}{2} \times 100 \%$$
$$= 14,045$$