

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 13 Minimum Visible Range [s] : 30

Maximum Visible Range [s] : 129

Start Analysis Time Range [s] : 30

End Analysis Time Range [s] : 128.95

Ladder Concentration [ng/μl] : 44

Uses Standard Area for Ladder Fragments

Lower Marker Concentration [ng/μl] : 4.2

Upper Marker Concentration [ng/μl] : 2.1

Used Upper Marker for Quantitation

Standard Curve Fit is Point to Point

Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 30

Integration End Time [s] : 128.95

Slope Threshold : 0.5

Height Threshold [FU] : 20

Area Threshold : 0.1

Width Threshold [s] : 0.5

Baseline Plateau [s] : 0.5

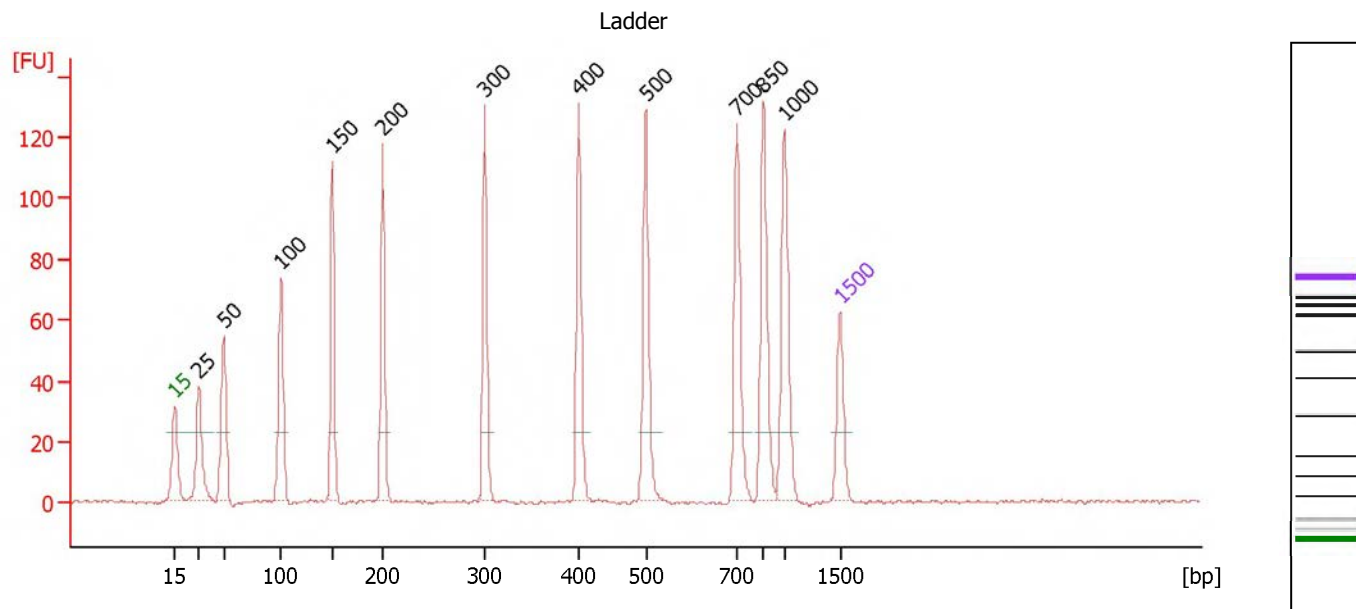
Filter Settings

Filter Width [s] : 0.5

Polynomial Order : 4

Ladder Peak	Size	Area
1	15	25
2	25	26
3	50	34
4	100	41
5	150	45
6	200	52
7	300	63
8	400	76
9	500	83
10	700	88
11	850	86
12	1000	90
13	1500	52

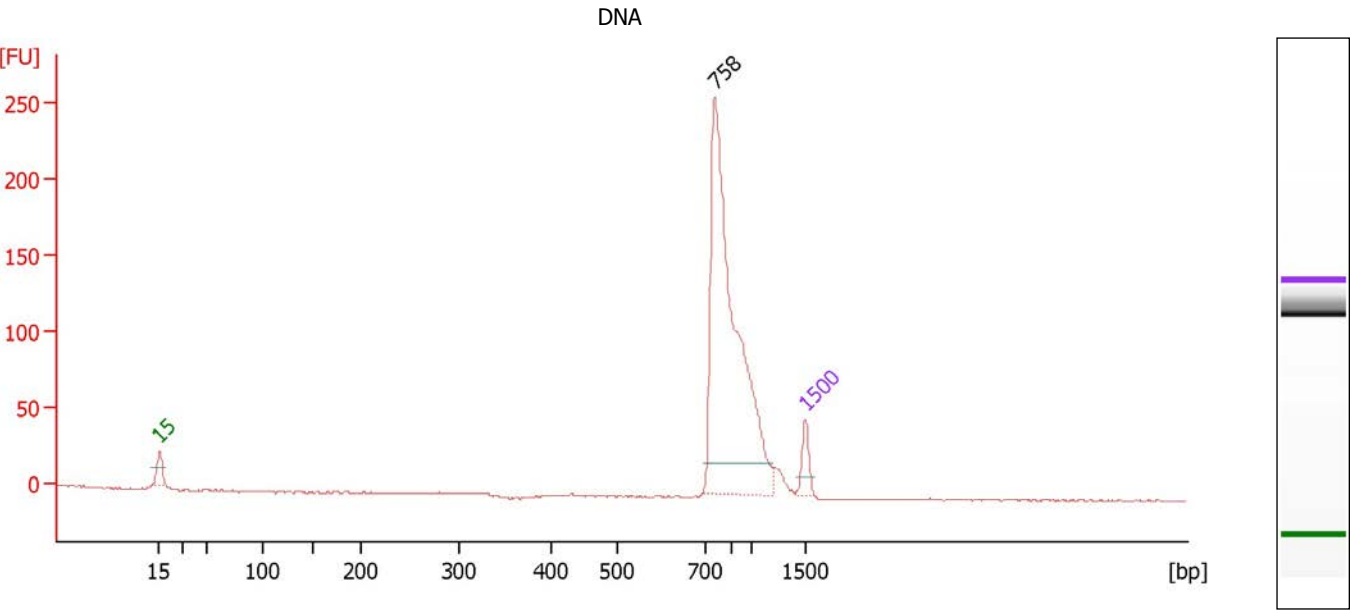
Electropherogram Summary



Peak table for Ladder

Peak		Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	◀	15	4.20	424.2	Lower Marker
2	└	25	4.00	242.4	Ladder Peak
3	└	50	4.00	121.2	Ladder Peak
4	└	100	4.00	60.6	Ladder Peak
5	└	150	4.00	40.4	Ladder Peak
6	└	200	4.00	30.3	Ladder Peak
7	└	300	4.00	20.2	Ladder Peak
8	└	400	4.00	15.2	Ladder Peak
9	└	500	4.00	12.1	Ladder Peak
10	└	700	4.00	8.7	Ladder Peak
11	└	850	4.00	7.1	Ladder Peak
12	└	1,000	4.00	6.1	Ladder Peak
13	▶	1,500	2.10	2.1	Upper Marker

Electropherogram Summary Continued ...



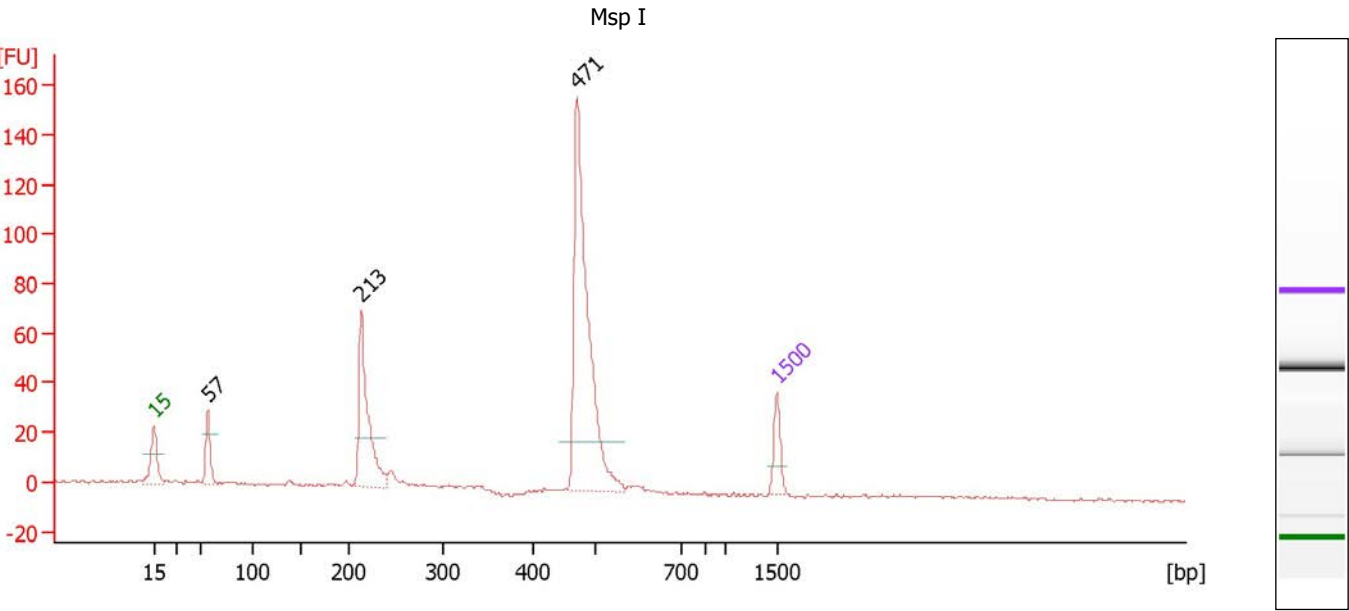
Overall Results for sample 1 : DNA

Number of peaks found: 1

Peak table for sample 1 : DNA

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	758	43.61	87.2	
3	1,500	2.10	2.1	Upper Marker

Electropherogram Summary Continued ...



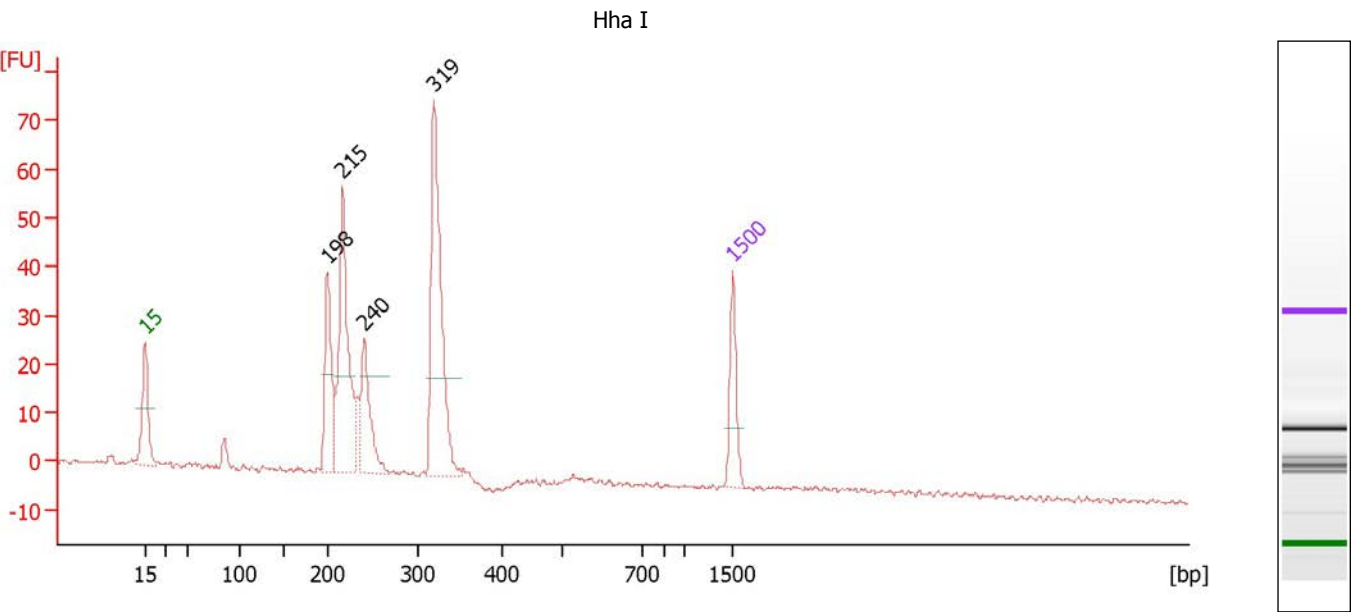
Overall Results for sample 2 : Msp I

Number of peaks found: 3

Peak table for sample 2 : Msp I

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	57	2.94	77.8	
3	213	9.19	65.3	
4	471	20.65	66.4	Upper Marker
5	1,500	2.10	2.1	

Electropherogram Summary Continued ...



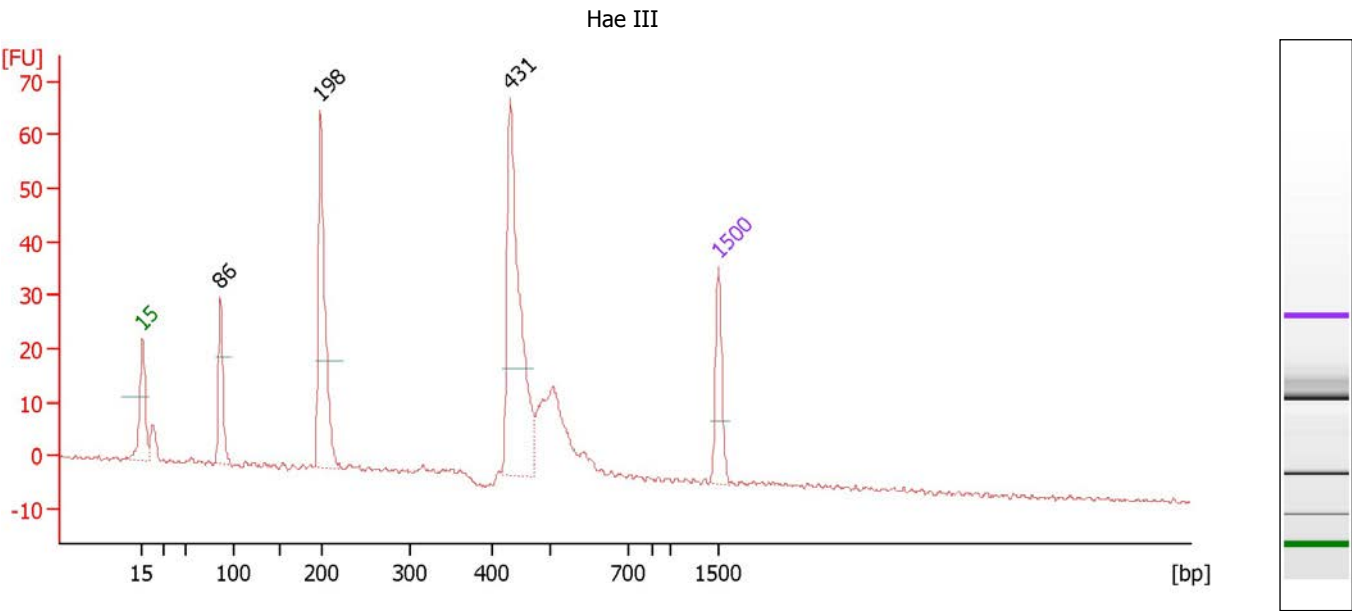
Overall Results for sample 4 : Hha I

Number of peaks found: 4

Peak table for sample 4 : Hha I

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	198	3.95	30.2	
3	215	7.52	53.0	
4	240	3.32	21.0	
5	319	8.72	41.5	Upper Marker
6	1,500	2.10	2.1	

Electropherogram Summary Continued ...



Overall Results for sample 5 : Hae III

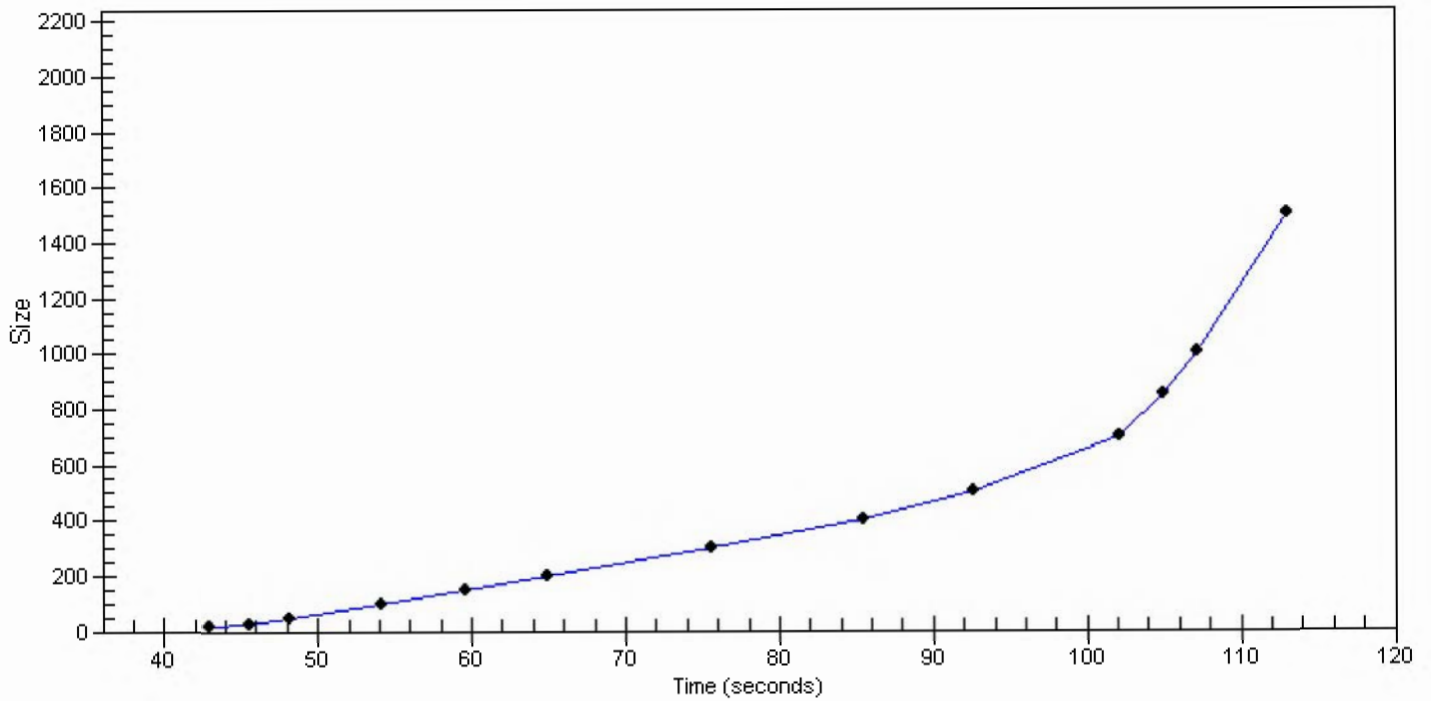
Number of peaks found: 3

Peak table for sample 5 : Hae III

Peak	Size [bp]	Conc. [ng/μl]	Molarity [nmol/l]	Observations
1	15	4.20	424.2	Lower Marker
2	86	2.96	52.1	
3	198	6.75	51.7	
4	431	9.05	31.8	
5	1,500	2.10	2.1	Upper Marker

Curves

Standard Curve



2100 expert_DNA 1000_DE34903611_2018-09-13_11-36-39.xad

Assay Class: DNA 1000
Data Path: C:\...-13\2100 expert_DNA 1000_DE34903611_2018-09-13_11-36-39.xad

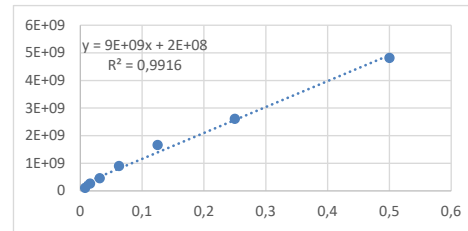
Created: 9/13/2018 11:36:39 AM
Modified: 9/13/2018 12:18:35 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time Stamp	Time Zone	User	Host
Run ended on port 2 (Number of wells acquired: 13)		Instrument	Run		9/13/2018 12:18:29 PM	(GMT +02:00) W. Europe Standard Time	bioanalyser-user	LAB7-14
Run started on port 2 (File: C:\Documents and Settings\bioanalyser-user\Desktop\bio-data\2018-09-13\2100 expert_DNA 1000_DE34903611_2018-09-13_11-36-39.xad)		Instrument	Run		9/13/2018 11:36:46 AM	(GMT +02:00) W. Europe Standard Time	bioanalyser-user	LAB7-14
Product Number : G2938C		Instrument	Run		9/13/2018 11:36:46 AM	(GMT +02:00) W. Europe Standard Time	bioanalyser-user	LAB7-14
Name :		Instrument	Run		9/13/2018 11:36:46 AM	(GMT +02:00) W. Europe Standard Time	bioanalyser-user	LAB7-14
Vendor : Agilent Technologies		Instrument	Run		9/13/2018 11:36:46 AM	(GMT +02:00) W. Europe Standard Time	bioanalyser-user	LAB7-14
Serial# : DE34903611		Instrument	Run		9/13/2018 11:36:46 AM	(GMT +02:00) W. Europe Standard Time	bioanalyser-user	LAB7-14
Firmware : C.01.069		Instrument	Run		9/13/2018 11:36:46 AM	(GMT +02:00) W. Europe Standard Time	bioanalyser-user	LAB7-14
Cartridge : Electrode		Instrument	Run		9/13/2018 11:36:45 AM	(GMT +02:00) W. Europe Standard Time	bioanalyser-user	LAB7-14

Supplementary Data S2: CHEMICAL CHARACTERIZATION OF A GRIFFONIA SIMPLICIFOLIA EXTRACT CLAIMING A 95% CONTENT OF 5-HTTP

[C]	inj	Area
mg/mL	μL	Int.
0,5	1	4,82E+09
0,25	1	2,62E+09
0,125	1	1,67E+09
0,0625	1	9,08E+08
0,03125	1	4,66E+08
0,015625	1	2,65E+08
0,007813	1	1,14E+08

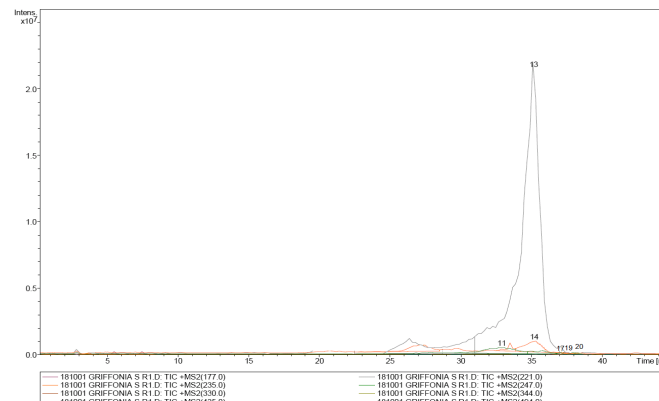


m	q
1E+10	0
4,13E+08	#N/D
0,989983	2,38E+08
592,9599	6
3,36E+19	3,4E+17
#N/D	#N/D

RT	Compound	MW	[M+H] ⁺	m/z		
35,10	1H-indole-3-carboxylic acid	161,0	162,0	143,8	115,9	
38,10	5-hydroxytryptamine	176,0	177,0	158,8	135,8	117,0
4,35	5-hydroxy-3-(2-hydroxyethyl)indole	177,0	178,0	159,8	132,9	115,0
23,95	5-hydroxytryptophan	220,0	221,0	204,0	161,9	
37,32	3-Carboxy-6-hydroxy-β-carbonyl	228,0	229,0	210,0	183,0	101,1
33,09	Hytioerectine B	246,0	247,0	229,9	203,9	174,0
30,11	Griffonine	329,0	330,0	167,9		
44,47	Hyrtilsulawesine	343,0	344,0	228,9	200,9	182,9
	Peak X	234,0	235,0	217,0	162,0	181,0
	Peak E	435,0				

	g	mL	FD
95	0,0486	10	5
70	0,0467	10	5

#	RT	Compound	Area		mg/mL		mg/g as per Dilution Factor				
			R1	R2	R1	R2	R1	R2	MEAN	ST. DEV.	%CV
n.d	35,10	1H-indole-3-carboxylic acid			0	0	0,00	0,00	n.d.		
n.d	38,10	5-hydroxytryptamine			0	0	0,00	0,00	n.d.		
n.d	4,35	5-hydroxy-3-(2-hydroxyethyl)indole			0	0	0,00	0,00	n.d.		
13	35,95	5-hydroxytryptophan	6,63E+09	6,12E+09	0,660043	0,609694	679,06	627,26	653,16	2,88	0,44
n.d	37,32	3-Carboxy-6-hydroxy-β-carbonyl			0	0	0,00	0,00	n.d.		
11	33,09	Hytioerectine B	31820170	30456871	0,003168	0,003032	3,26	3,12	3,19	0,12	3,76
17	32,99	Griffonine	7264692	71478540	0,000723	0,007116	0,74	7,32	4,03	0,06	1,49
20	39,01	Hyrtilsulawesine	9521621	9423698	0,000948	0,000938	0,98	0,97	0,97	0,01	1,03
14	36,01	Peak X	3,34E+08	3,1E+08	0,033226		34,18		34,18	0,01	0,03
19	37,98	Peak E	53820262	51248582	0,005358		5,51		5,51	0,01	0,18



5-HTTP to Alkaloid RATIO		
	mg/g	
5-hydroxytryptophan	653	
Other alkaloids	48	
Ratio	14	:1

The results show that the chemical characterization indicates that the real content of 5-HTTP is not 95%, but 65%.

The ratio between 5-HTTP and other alkaloids is 14:1

The presence of peak E indicates a possible bacterial fermentation process

