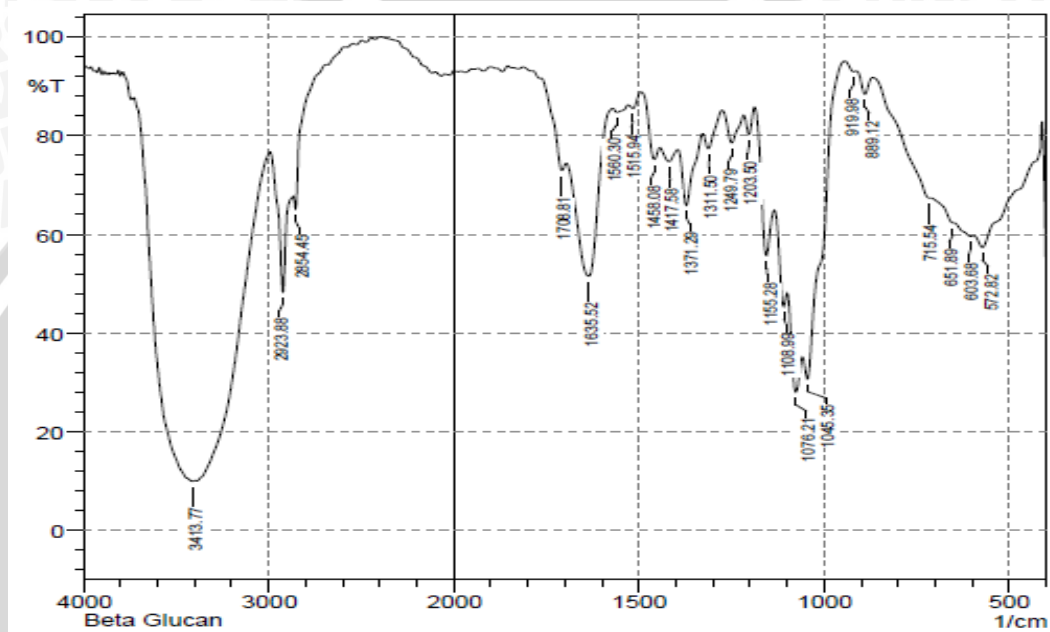


LAMPIRAN

Lampiran 1. Hasil Karakterisasi Ekstrak *Beta Glucan* Menggunakan Uji *Fourier Transform Infrared Spectroscopy*

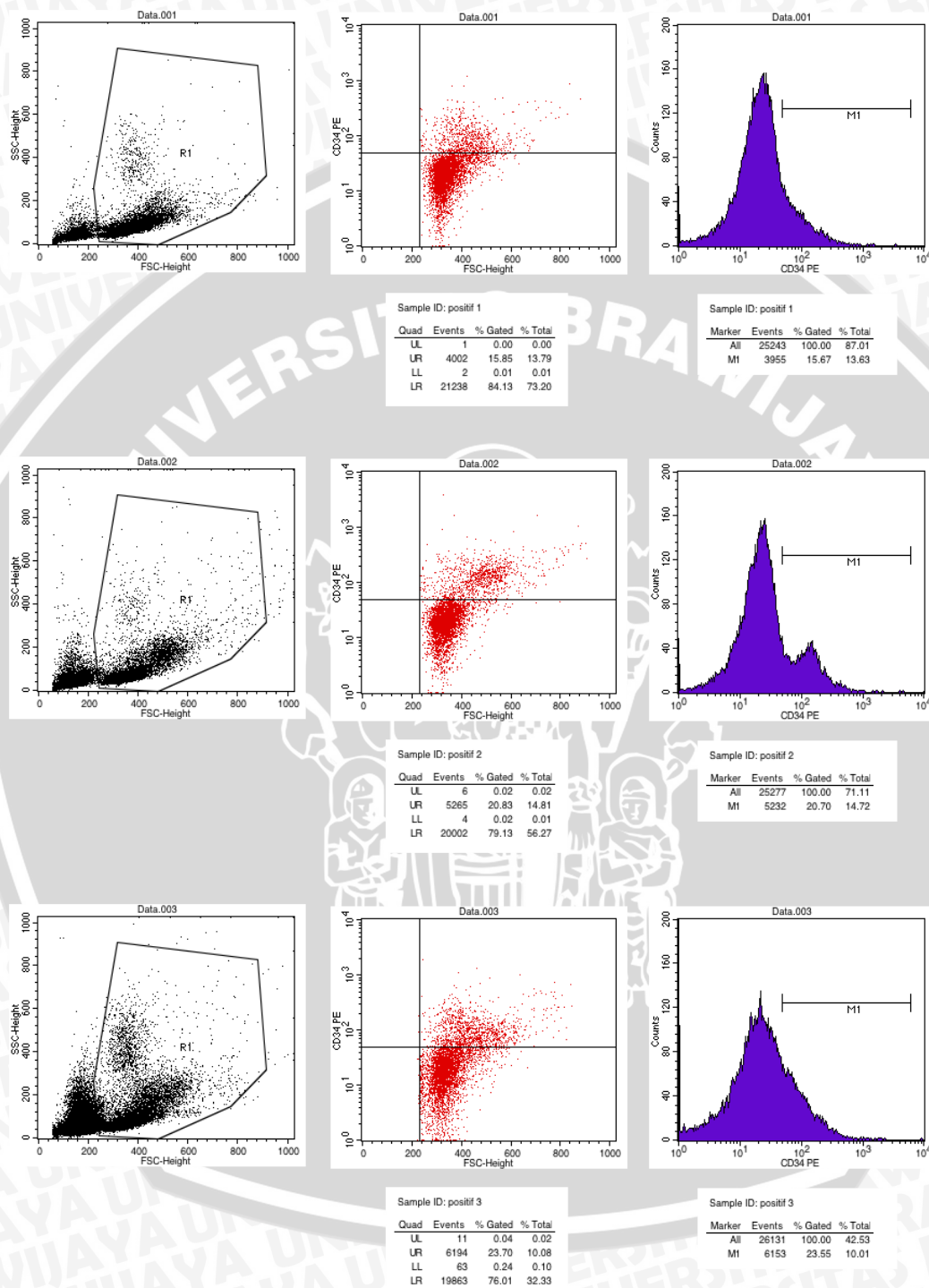


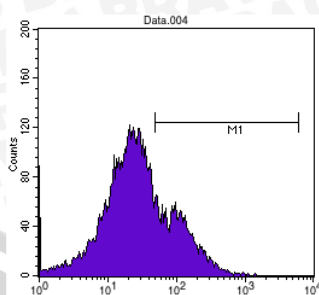
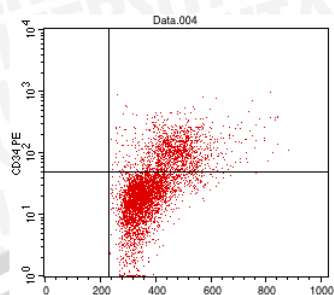
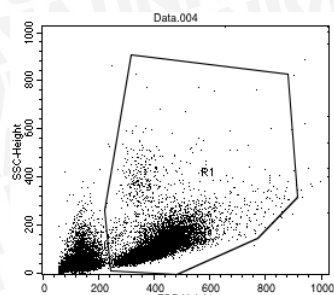
Absorption band (cm ⁻¹)	Karakterisasi gugus fungsi
3413.77	OH stretching vibration
2923.88	CH stretching vibration
1635.52	Amide bands
1560.30	Amide bands
1155.28	v(C-C) dan v(C-O-C)
889.12	β -glycosidic bond

Hasil FT-IR ekstraksi menunjukkan adanya kandungan *beta glucan*. Dari hasil uji FT-IR didapatkan *absorption band* 1155.28, 1076.21, dan 1045.35 yang merupakan karakteristik dari (1,3)(1,6)-*beta-d-glucan* (ditandai dengan lingkaran merah).



Lampiran 2. Hasil *flowcytometry*



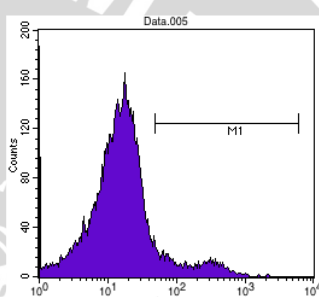
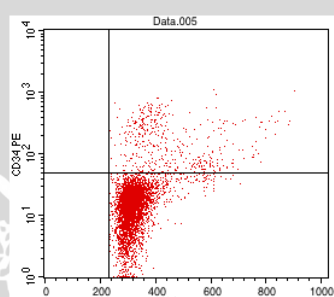
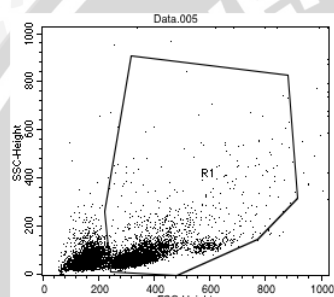


Sample ID: positif 4

Quad	Events	% Gated	% Total
UL	4	0.02	0.01
UR	6635	26.36	15.92
LL	1	0.00	0.00
LR	18531	73.62	44.46

Sample ID: positif 4

Marker	Events	% Gated	% Total
All	25171	100.00	60.39
M1	6582	26.15	15.79

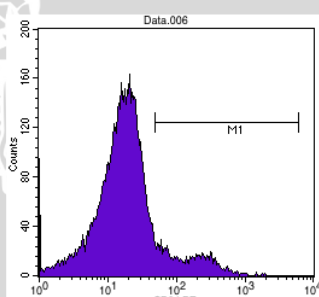
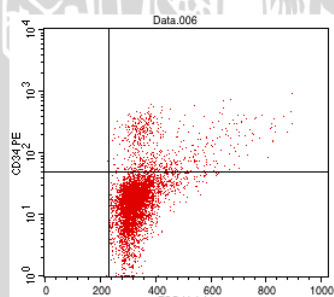
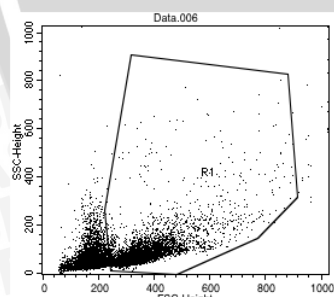


Sample ID: negatif 1

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	2209	8.69	6.88
LL	2	0.01	0.01
LR	23196	91.30	72.24

Sample ID: negatif 1

Marker	Events	% Gated	% Total
All	25407	100.00	72.12
M1	2184	8.60	6.80

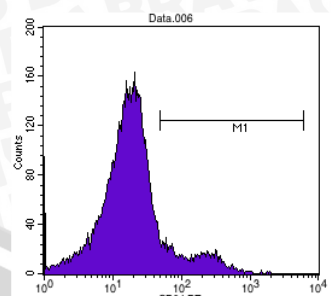
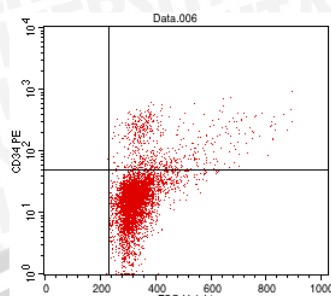
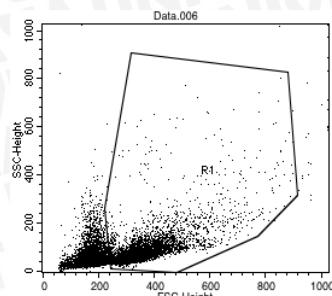


Sample ID: negatif 2

Quad	Events	% Gated	% Total
UL	1	0.00	0.00
UR	2919	11.40	8.32
LL	15	0.06	0.04
LR	22678	88.54	64.62

Sample ID: negatif 2

Marker	Events	% Gated	% Total
All	25613	100.00	72.99
M1	2897	11.31	8.26

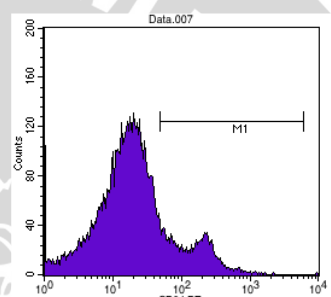
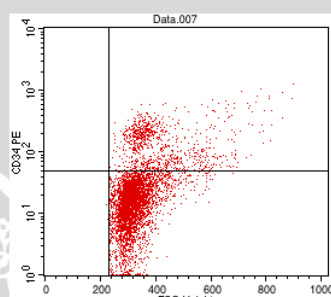
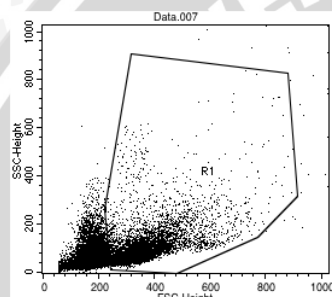


Sample ID: negatif 2

Quad	Events	% Gated	% Total
UL	1	0.00	0.00
UR	2919	11.40	8.32
LL	15	0.06	0.04
LR	22678	88.54	64.62

Sample ID: negatif 2

Marker	Events	% Gated	% Total
All	25613	100.00	72.99
M1	2897	11.31	8.26

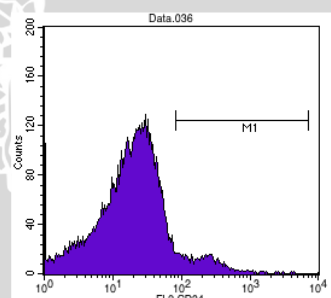
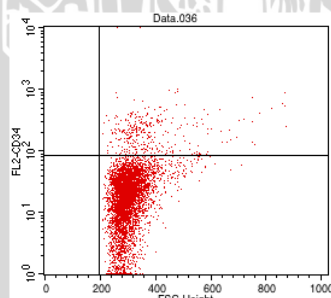
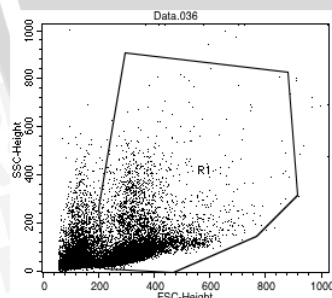


Sample ID: negatif 4

Quad	Events	% Gated	% Total
UL	8	0.03	0.02
UR	4710	18.12	10.17
LL	47	0.18	0.10
LR	21226	81.67	45.81

Sample ID: negatif 4

Marker	Events	% Gated	% Total
All	25991	100.00	56.09
M1	4683	18.02	10.11

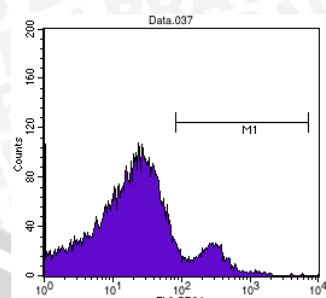
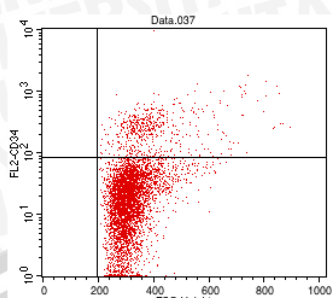
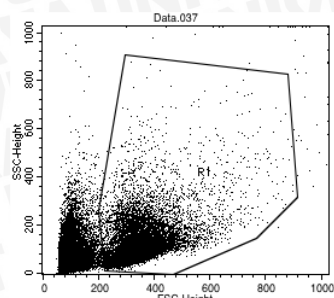


Sample ID: E1

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	1683	6.65	5.40
LL	0	0.00	0.00
LR	23608	93.35	75.81

Sample ID: E1

Marker	Events	% Gated	% Total
All	25291	100.00	81.22
M1	1689	6.68	5.42

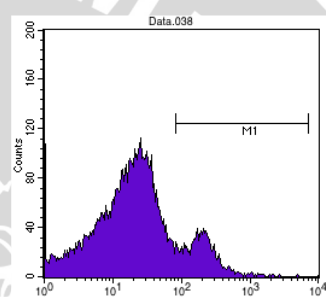
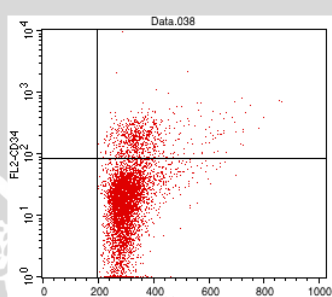
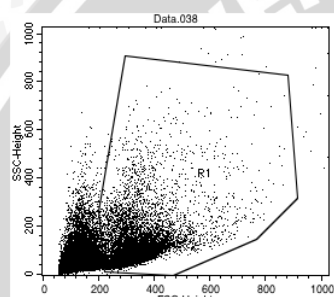


Sample ID: E2

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	2931	11.63	5.98
LL	0	0.00	0.00
LR	22268	88.37	45.44

Sample ID: E2

Marker	Events	% Gated	% Total
All	25199	100.00	51.43
M1	2954	11.72	6.03

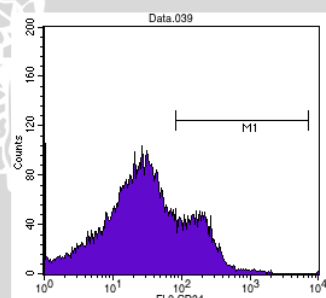
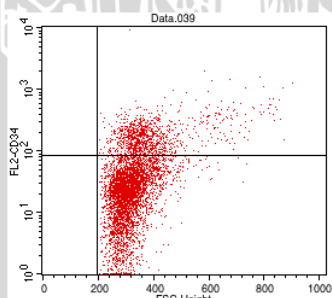
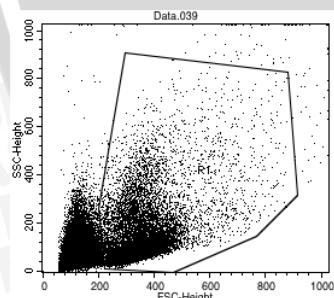


Sample ID: E3

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	3539	14.00	8.79
LL	0	0.00	0.00
LR	21748	86.00	54.01

Sample ID: E3

Marker	Events	% Gated	% Total
All	25287	100.00	62.80
M1	3557	14.07	8.83

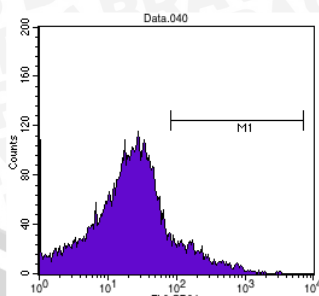
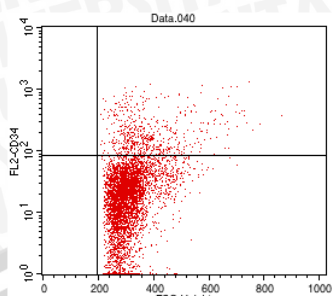
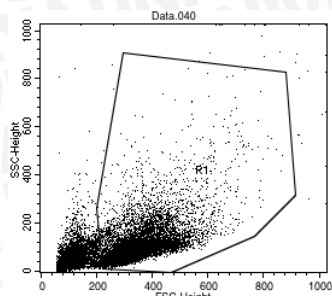


Sample ID: E4

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	5604	22.25	7.77
LL	0	0.00	0.00
LR	19583	77.75	27.16

Sample ID: E4

Marker	Events	% Gated	% Total
All	25187	100.00	34.93
M1	5636	22.38	7.82

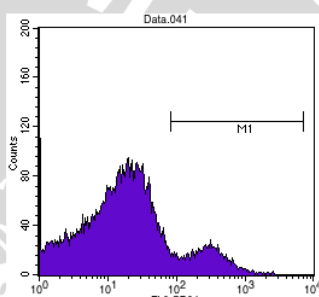
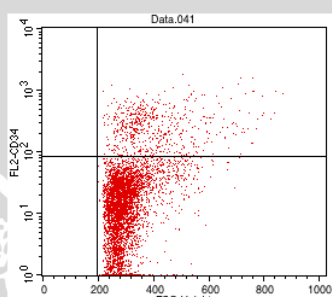
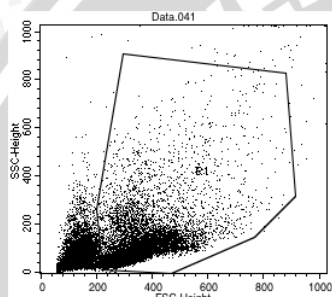


Sample ID: F1

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	2825	11.12	9.19
LL	0	0.00	0.00
LR	22577	88.88	73.44

Sample ID: F1

Marker	Events	% Gated	% Total
All	25402	100.00	82.62
M1	2845	11.20	9.25

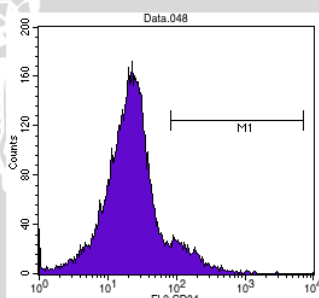
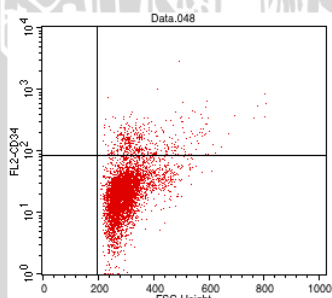
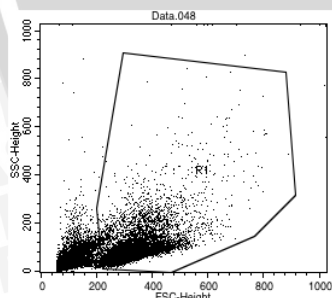


Sample ID: F2

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	3082	11.92	9.00
LL	0	0.00	0.00
LR	22781	88.08	66.54

Sample ID: F2

Marker	Events	% Gated	% Total
All	25863	100.00	75.54
M1	3099	11.98	9.05

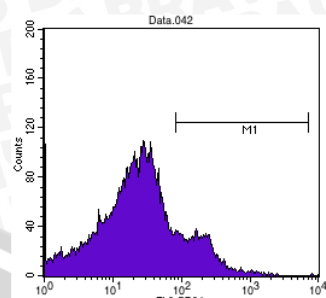
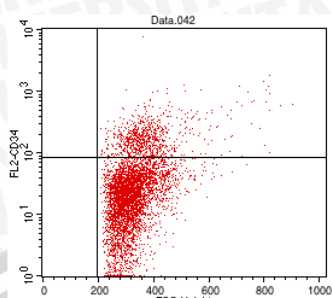
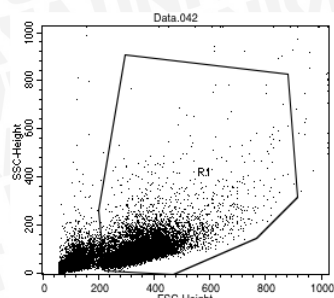


Sample ID: F3

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	2046	8.04	6.56
LL	0	0.00	0.00
LR	23408	91.96	75.10

Sample ID: F3

Marker	Events	% Gated	% Total
All	25454	100.00	81.66
M1	2061	8.10	6.61

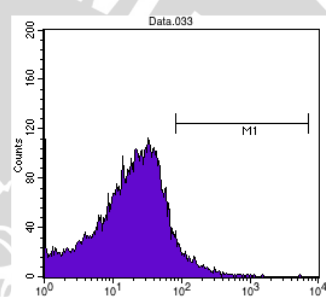
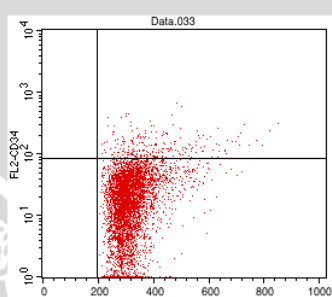
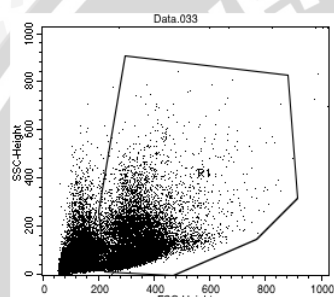


Sample ID: F4

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	4179	16.47	14.29
LL	0	0.00	0.00
LR	21189	83.53	72.47

Sample ID: F4

Marker	Events	% Gated	% Total
All	25368	100.00	86.77
M1	4208	16.59	14.39

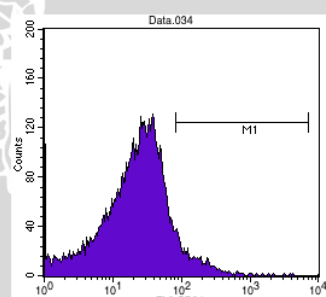
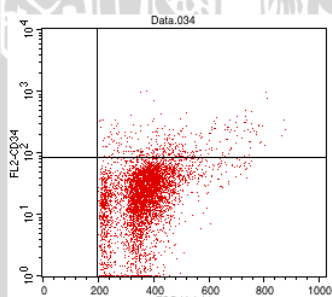
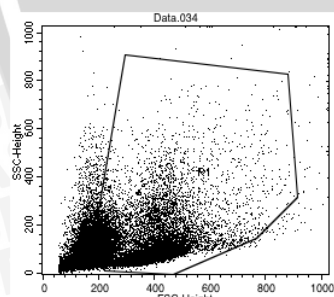


Sample ID: D1

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	1226	4.85	2.89
LL	0	0.00	0.00
LR	24027	95.15	56.59

Sample ID: D1

Marker	Events	% Gated	% Total
All	25253	100.00	59.48
M1	1248	4.94	2.94

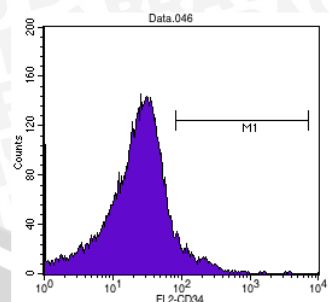
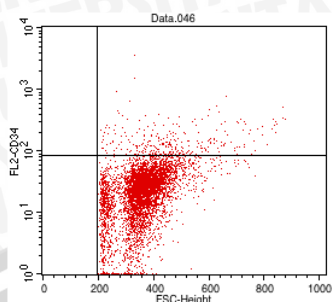
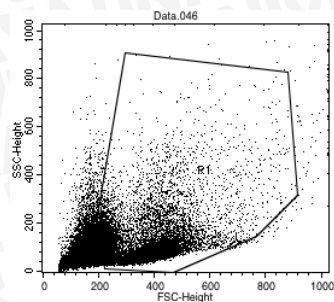


Sample ID: D2

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	1720	6.59	4.09
LL	0	0.00	0.00
LR	24377	93.41	57.99

Sample ID: D2

Marker	Events	% Gated	% Total
All	26097	100.00	62.08
M1	1750	6.71	4.16

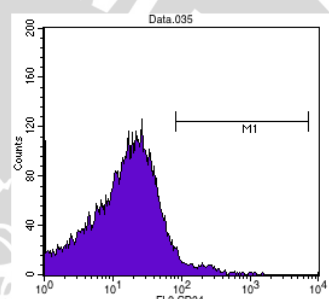
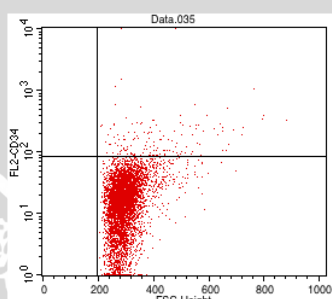
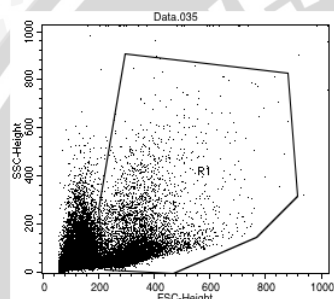


Sample ID: D3

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	1586	6.06	3.63
LL	0	0.00	0.00
LR	24596	93.94	56.34

Sample ID: D3

Marker	Events	% Gated	% Total
All	26182	100.00	59.97
M1	1618	6.18	3.71



Sample ID: D4

Quad	Events	% Gated	% Total
UL	0	0.00	0.00
UR	806	3.15	1.83
LL	0	0.00	0.00
LR	24741	96.85	56.19

Sample ID: D4

Marker	Events	% Gated	% Total
All	25547	100.00	58.02
M1	814	3.19	1.85

Lampiran 3. Hasil Analisis Data

Tabel 1. Hasil Uji Normalitas Data Saphiro-Wilk

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CD34	.165	20	.157	.949	20	.348

a. Lilliefors Significance Correction

Tests of Normality							
	Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
CD34	Kp	.216	4	.	.955	4	.746
	Kn	.347	4	.	.865	4	.279
	P1	.227	4	.	.972	4	.852
	P2	.246	4	.	.965	4	.812
	P3	.222	4	.	.941	4	.663

a. Lilliefors Significance Correction

Deskriptif

Descriptives					Statistic	Std. Error
	Kelompok					
CD34	Kp	Mean			21.7950	2.35350
		95% Confidence Interval for Mean	Lower Bound		14.3051	
			Upper Bound		29.2849	
		5% Trimmed Mean			21.8772	
		Median			22.5350	
		Variance			22.156	
		Std. Deviation			4.70701	
		Minimum			15.73	
		Maximum			26.38	
		Range			10.65	
		Interquartile Range			8.96	
		Skewness			-.697	1.014
		Kurtosis			-.944	2.619
	Kn	Mean			12.6100	2.13396

P1	95% Confidence Interval for	Lower Bound	5.8188	
	Mean	Upper Bound	19.4012	
	5% Trimmed Mean		12.4878	
	Median		11.5100	
	Variance		18.215	
	Std. Deviation		4.26791	
	Minimum		8.72	
	Maximum		18.70	
	Range		9.98	
	Interquartile Range		7.51	
	Skewness		1.409	1.014
	Kurtosis		2.650	2.619
	Mean		13.6325	3.25527
	95% Confidence Interval for	Lower Bound	3.2728	
	Mean	Upper Bound	23.9922	
P2	5% Trimmed Mean		13.5417	
	Median		12.8150	
	Variance		42.387	
	Std. Deviation		6.51055	
	Minimum		6.65	
	Maximum		22.25	
	Range		15.60	
	Interquartile Range		12.29	
	Skewness		.704	1.014
	Kurtosis		1.171	2.619
	Mean		11.8875	1.74147
	95% Confidence Interval for	Lower Bound	6.3454	
	Mean	Upper Bound	17.4296	
	5% Trimmed Mean		11.8467	
	Median		11.5200	
	Variance		12.131	
	Std. Deviation		3.48294	
	Minimum		8.04	
	Maximum		16.47	
	Range		8.43	

P3	Interquartile Range	6.52	
	Skewness	.613	1.014
	Kurtosis	1.460	2.619
	Mean	5.1625	.76328
	95% Confidence Interval for Mean	Lower Bound	2.7334
		Upper Bound	7.5916
	5% Trimmed Mean	5.1950	
	Median	5.4550	
	Variance	2.330	
	Std. Deviation	1.52655	
	Minimum	3.15	
	Maximum	6.59	
	Range	3.44	
	Interquartile Range	2.88	
	Skewness	-.853	1.014
	Kurtosis	-.478	2.619

Tabel 2. Hasil Uji Homogenitas Varian

Test of Homogeneity of Variances			
CD34			
Levene Statistic	df1	df2	Sig.
1,028	4	15	,425

Tabel 3. Hasil Uji Statistik *one-way ANOVA*

ANOVA					
CD34					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	562,267	4	140,567	7,229	,002
Within Groups	291,658	15	19,444		
Total	853,925	19			

Tabel 4. Hasil Uji Post Hoc

Multiple Comparisons						
Dependent Variable: CD34						
LSD						
(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	9,18500*	3,11800	,010	2,5391	15,8309
	3	8,16250*	3,11800	,019	1,5166	14,8084
	4	9,90750*	3,11800	,006	3,2616	16,5534
	5	16,63250*	3,11800	,000	9,9866	23,2784
2	1	-9,18500*	3,11800	,010	-15,8309	-2,5391
	3	-1,02250	3,11800	,747	-7,6684	5,6234
	4	,72250	3,11800	,820	-5,9234	7,3684
	5	7,44750*	3,11800	,030	,8016	14,0934
3	1	-8,16250*	3,11800	,019	-14,8084	-1,5166
	2	1,02250	3,11800	,747	-5,6234	7,6684
	4	1,74500	3,11800	,584	-4,9009	8,3909
	5	8,47000*	3,11800	,016	1,8241	15,1159
4	1	-9,90750*	3,11800	,006	-16,5534	-3,2616
	2	-,72250	3,11800	,820	-7,3684	5,9234
	3	-1,74500	3,11800	,584	-8,3909	4,9009
	5	6,72500*	3,11800	,048	,0791	13,3709
5	1	-16,63250*	3,11800	,000	-23,2784	-9,9866
	2	-7,44750*	3,11800	,030	-14,0934	-,8016
	3	-8,47000*	3,11800	,016	-15,1159	-1,8241
	4	-6,72500*	3,11800	,048	-13,3709	-,0791

*. The mean difference is significant at the 0.05 level.

Tabel 5. Hasil Uji Korelasi Pearson

Correlations			
		CD34	Kelompok
CD34	Pearson Correlation	1	-,736**
	Sig. (2-tailed)		,000
	N	20	20
Kelompok	Pearson Correlation	-,736**	1
	Sig. (2-tailed)	,000	
	N	20	20

** . Correlation is significant at the 0.01 level (2-tailed).



Lampiran 4. Pernyataan Keaslian Tulisan**PERNYATAAN KEASLIAN TULISAN**

Saya yang bertanda tangan dibawah ini:

Nama : Triara Mayona

NIM : 135070101111023

Program Studi : Program Studi Kedokteran

Fakultas Kedokteran Universitas Brawijaya

Menyatakan dengan sebenarnya bahwa Tugas Akhir yang saya tulis ini benar-benar hasil karya saya sendiri, bukan merupakan pengambilan alihan tulisan atau pikiran orang lain yang saya akui sebagai tulisan atau pikiran saya. Apabila di kemudian hari dapat dibuktikan bahwa Tugas Akhir ini adalah hasil jiplakan, maka saya bersedia menerima sanksi atas perbuatan tersebut.

Malang,

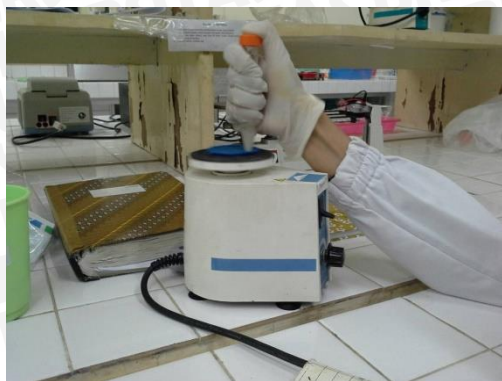
Yang membuat pernyataan,

(Triara Mayona)

NIM. 135070101111023

Lampiran 5. Dokumentasi Penelitian





Lampiran 6. Lembar Kelaikan Etik



KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI
UNIVERSITAS BRAWIJAYA
FAKULTAS KEDOKTERAN
KOMISI ETIK PENELITIAN KESEHATAN

Jalan Veteran Malang - 65145, Jawa Timur - Indonesia
Telp. (62) (0341) 551611 Ext. 168; 569117; 567192 - Fax. (62) (0341) 564755
http://www.fk.ub.ac.id e-mail : kep.fk@ub.ac.id

Nomor : 536 A /UN10.7/UPT.KEPK/2015
Lampiran : --
Perihal : Penambahan Anggota Penelitian

17 NOV 2015

Yth. Triara Mayona
Fakultas Kedokteran Universitas Brawijaya

Menanggapi surat dari Triara Mayona tanggal 11 November 2015 perihal Penambahan Anggota Penelitian, pada penelitian dibawah ini :

Judul : REVERT (*Regeneration by Hematopoietic Stem Cells For Liver Fibrosis Therapy*): Pengembangan Terapi Fibrosis Hepar Menggunakan Beta Glucan dari *Saccharomyces cerevisiae* Berbasis Mobilisasi *Hematopoietic Stem Cells (HSCs)*

Peneliti : 1. Surya Iman Muhammad
2. Khoiruisah Dwi Hartanti
3. Putri Shafrina Thahir
4. Hyang Iman Akbar Saputra
5. Bahiratul Nadliyah

Pada prinsipnya kami menyetujui perubahan tersebut. Dengan demikian pada *ethical clearance* yang sudah kami terbitkan bisa dilampirkan tambahan nama anggota peneliti sebagaimana yang Saudara ajukan a.n. Triara Mayona.

Demikian atas perhatiannya kami sampaikan terima kasih.

Ketua Komisi Etik Penelitian Kesehatan FKUB



Prof. Dr. dr. Moch. Istiadid ES, SpS, SpBS(K) M.Hum
NIP. 194605461971111001





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KOMISI ETIK PENELITIAN KESEHATAN
HEALTH RESEARCH ETHICS COMMITTEE
Jalan Veteran Malang – 65145
Telp./ Fax. (62) 341 - 553930

KETERANGAN KELAIKAN ETIK
("ETHICAL CLEARANCE")

No. 226 / EC / KEPK – PKM / 03 / 2015

KOMISI ETIK PENELITIAN KESEHATAN FAKULTAS KEDOKTERAN UNIVERSITAS BRAWIJAYA, SETELAH MEMPELAJARI DENGAN SEKSAMA RANCANGAN PENELITIAN YANG DIUSULKAN, DENGAN INI MENYATAKAN BAHWA PENELITIAN DENGAN

JUDUL : REVERT (*Regeneration by Hematopoietic Stem Cell for Liver Fibrosis Therapy*) : Pengembangan Terapi Fibrosis Hepar Menggunakan Beta Glucan dari *Saccharomyces cerevisiae* Berbasis Mobilisasi Hematopoietic Stem Cells (HSCs)

PENELITI : Surya Iman Muhammad
Khoirunisah Dwi Hartanti
Putri Shafarina Thahir
Hyang Iman Akbar Saputra
Bahiratul Nahdliyah

UNIT / LEMBAGA : PKM – Fakultas Kedokteran – Universitas Brawijaya Malang

TEMPAT PENELITIAN : Fakultas Kedokteran Universitas Brawijaya

DINYATAKAN LAIK ETIK.



Prof. Dr. Teguh W. Sardjono, DTM&H, MSc, SpPark
NIP. 19620410 198002 1 001

Catatan :

Keterangan Laik Etik Ini Berlaku 1 (Satu) Tahun Sejak Tanggal Dikeluarkan
Pada Akhir Penelitian, Laporan Pelaksanaan Penelitian Harus Diserahkan Kepada KEPK-FKUB Dalam Bentuk Soft Copy. Jika Ada Perubahan Protokol Dan / Atau Perpanjangan Penelitian, Harus Mengajukan Kembali Permohonan Kajian Etik Penelitian (Amandemen Protokol).