

LAMPIRAN

LAMPIRAN 1

Penghitungan Statistik SPSS 15.0 untuk Pengujian Pengaruh Ekstrak Buah Merah Terhadap Proliferasi Sel Leukosit non-T Tanpa Menggunakan LPS

Oneway

Descriptives

Proliferasi									
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
koneg	3	.27800	.019975	.011533	.22838	.32762	.255	.291	
dss	3	.27200	.027622	.015948	.20338	.34062	.241	.294	
bm	3	.26367	.026006	.015015	.19906	.32827	.238	.290	
p1	3	.43433	.080755	.046624	.23373	.63494	.365	.523	
p2	3	.33967	.025541	.014746	.27622	.40311	.311	.360	
p3	3	.32600	.149121	.086095	-.04444	.69644	.233	.498	
Total	18	.31894	.085642	.020186	.27636	.36153	.233	.523	

ANOVA

Proliferasi						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	.062	5	.012	2.388	.101	
Within Groups	.062	12	.005			
Total	.125	17				

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Proliferasi

Tukey HSD

(I) perlakuan0	(J) perlakuan0	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
koneg	dss	.006000	.058925	1.000	-.19192	.20392
	bm	.014333	.058925	1.000	-.18359	.21226
	p1	-.156333	.058925	.157	-.35426	.04159
	p2	-.061667	.058925	.893	-.25959	.13626
	p3	-.048000	.058925	.959	-.24592	.14992
dss	koneg	-.006000	.058925	1.000	-.20392	.19192
	bm	.008333	.058925	1.000	-.18959	.20626
	p1	-.162333	.058925	.134	-.36026	.03559
	p2	-.067667	.058925	.852	-.26559	.13026
	p3	-.054000	.058925	.935	-.25192	.14392
bm	koneg	-.014333	.058925	1.000	-.21226	.18359
	dss	-.008333	.058925	1.000	-.20626	.18959
	p1	-.170667	.058925	.107	-.36859	.02726
	p2	-.076000	.058925	.785	-.27392	.12192
	p3	-.062333	.058925	.889	-.26026	.13559
p1	koneg	.156333	.058925	.157	-.04159	.35426
	dss	.162333	.058925	.134	-.03559	.36026
	bm	.170667	.058925	.107	-.02726	.36859
	p2	.094667	.058925	.610	-.10326	.29259
	p3	.108333	.058925	.479	-.08959	.30626
p2	koneg	.061667	.058925	.893	-.13626	.25959
	dss	.067667	.058925	.852	-.13026	.26559
	bm	.076000	.058925	.785	-.12192	.27392
	p1	-.094667	.058925	.610	-.29259	.10326
	p3	.013667	.058925	1.000	-.18426	.21159
p3	koneg	.048000	.058925	.959	-.14992	.24592
	dss	.054000	.058925	.935	-.14392	.25192
	bm	.062333	.058925	.889	-.13559	.26026
	p1	-.108333	.058925	.479	-.30626	.08959
	p2	-.013667	.058925	1.000	-.21159	.18426

Homogeneous Subsets

Proliferasi		
Tukey HSD ^a		
perlakuan0	N	Subset for alpha = .05
		1
bm	3	.26367
dss	3	.27200
koneg	3	.27800
p3	3	.32600
p2	3	.33967
p1	3	.43433
Sig.		.107

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

LAMPIRAN 2

Penghitungan Statistik SPSS 15.0 untuk Pengujian Pengaruh Ekstrak Buah Merah Terhadap Proliferasi Sel Leukosit non-T Menggunakan LPS 0,1 $\mu\text{g/ml}$

Oneway

Descriptives

Proliferasi								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
koneg	4	.31800	.119351	.059676	.12809	.50791	.160	.450
dss	4	.30375	.038405	.019202	.24264	.36486	.272	.358
bm	4	.29350	.114579	.057289	.11118	.47582	.132	.395
p1	4	.47475	.153611	.076805	.23032	.71918	.335	.693
p2	4	.35775	.088081	.044040	.21759	.49791	.290	.485
p3	4	.40925	.077873	.038937	.28534	.53316	.303	.486
Total	24	.35950	.113939	.023258	.31139	.40761	.132	.693

ANOVA

Proliferasi						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	.100	5	.020	1.807	.162	
Within Groups	.199	18	.011			
Total	.299	23				

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Proliferasi
Tukey HSD

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
perlakuan0.1 koneg	dss	.014250	.074312	1.000	-.22192	.25042
	bm	.024500	.074312	.999	-.21167	.26067
	p1	-.156750	.074312	.326	-.39292	.07942
	p2	-.039750	.074312	.994	-.27592	.19642
	p3	-.091250	.074312	.818	-.32742	.14492
dss	koneg	-.014250	.074312	1.000	-.25042	.22192
	bm	.010250	.074312	1.000	-.22592	.24642
	p1	-.171000	.074312	.244	-.40717	.06517
	p2	-.054000	.074312	.976	-.29017	.18217
	p3	-.105500	.074312	.715	-.34167	.13067
bm	koneg	-.024500	.074312	.999	-.26067	.21167
	dss	-.010250	.074312	1.000	-.24642	.22592
	p1	-.181250	.074312	.195	-.41742	.05492
	p2	-.064250	.074312	.950	-.30042	.17192
	p3	-.115750	.074312	.634	-.35192	.12042
p1	koneg	.156750	.074312	.326	-.07942	.39292
	dss	.171000	.074312	.244	-.06517	.40717
	bm	.181250	.074312	.195	-.05492	.41742
	p2	.117000	.074312	.624	-.11917	.35317
	p3	.065500	.074312	.946	-.17067	.30167
p2	koneg	.039750	.074312	.994	-.19642	.27592
	dss	.054000	.074312	.976	-.18217	.29017
	bm	.064250	.074312	.950	-.17192	.30042
	p1	-.117000	.074312	.624	-.35317	.11917
	p3	-.051500	.074312	.980	-.28767	.18467
p3	koneg	.091250	.074312	.818	-.14492	.32742
	dss	.105500	.074312	.715	-.13067	.34167
	bm	.115750	.074312	.634	-.12042	.35192
	p1	-.065500	.074312	.946	-.30167	.17067
	p2	.051500	.074312	.980	-.18467	.28767

Homogeneous Subsets

Proliferasi		
Tukey HSD ^a		
perlakuan0.1	N	Subset for alpha = .05
bm	4	1
dss	4	.29350
koneg	4	.30375
p2	4	.31800
p3	4	.35775
p1	4	.40925
Sig.		.47475
		.195

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

LAMPIRAN 3

Penghitungan Statistik SPSS 15.0 untuk Pengujian Pengaruh Ekstrak Buah Merah Terhadap Proliferasi Sel Leukosit non-T Menggunakan LPS 1 µg/ml

Oneway

Descriptives

Proliferasi								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
koneg	4	.31575	.041080	.020540	.25038	.38112	.265	.365
dss	4	.27050	.072689	.036344	.15484	.38616	.165	.325
bm	4	.31350	.007326	.003663	.30184	.32516	.305	.321
p1	4	.46825	.038239	.019120	.40740	.52910	.437	.524
p2	4	.30300	.048477	.024238	.22586	.38014	.253	.358
p3	4	.64250	.094412	.047206	.49227	.79273	.536	.733
Total	24	.38558	.143127	.029216	.32515	.44602	.165	.733

ANOVA

Proliferasi						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	.412	5	.082	25.026	.000	
Within Groups	.059	18	.003			
Total	.471	23				

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Proliferasi

Tukey HSD

(I) perlakuan1	(J) perlakuan1	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
koneg	dss	.045250	.040570	.869	-.08368	.17418
	bm	.002250	.040570	1.000	-.12668	.13118
	p1	-.152500*	.040570	.015	-.28143	-.02357
	p2	.012750	.040570	1.000	-.11618	.14168
	p3	-.326750*	.040570	.000	-.45568	-.19782
dss	koneg	-.045250	.040570	.869	-.17418	.08368
	bm	-.043000	.040570	.891	-.17193	.08593
	p1	-.197750*	.040570	.001	-.32668	-.06882
	p2	-.032500	.040570	.964	-.16143	.09643
	p3	-.372000*	.040570	.000	-.50093	-.24307
bm	koneg	-.002250	.040570	1.000	-.13118	.12668
	dss	.043000	.040570	.891	-.08593	.17193
	p1	-.154750*	.040570	.014	-.28368	-.02582
	p2	.010500	.040570	1.000	-.11843	.13943
	p3	-.329000*	.040570	.000	-.45793	-.20007
p1	koneg	.152500*	.040570	.015	.02357	.28143
	dss	.197750*	.040570	.001	.06882	.32668
	bm	.154750*	.040570	.014	.02582	.28368
	p2	.165250*	.040570	.008	.03632	.29418
	p3	-.174250*	.040570	.005	-.30318	-.04532
p2	koneg	-.012750	.040570	1.000	-.14168	.11618
	dss	.032500	.040570	.964	-.09643	.16143
	bm	-.010500	.040570	1.000	-.13943	.11843
	p1	-.165250*	.040570	.008	-.29418	-.03632
	p3	-.339500*	.040570	.000	-.46843	-.21057
p3	koneg	.326750*	.040570	.000	.19782	.45568
	dss	.372000*	.040570	.000	.24307	.50093
	bm	.329000*	.040570	.000	.20007	.45793
	p1	.174250*	.040570	.005	.04532	.30318
	p2	.339500*	.040570	.000	.21057	.46843

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Proliferasi

Tukey HSD^a

perlakuan1	N	Subset for alpha = .05		
		1	2	3
dss	4	.27050		
p2	4	.30300		
bm	4	.31350		
koneg	4	.31575		
p1	4		.46825	
p3	4			.64250
Sig.		.869	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

LAMPIRAN 4

Penghitungan Statistik SPSS 15.0 untuk Pengujian Pengaruh Ekstrak Buah Merah Terhadap Proliferasi Sel Leukosit non-T Menggunakan LPS 10 µg/ml

Oneway

Descriptives

Proliferasi								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
koneg	4	.28950	.010878	.005439	.27219	.30681	.278	.304
dss	4	.31125	.009535	.004768	.29608	.32642	.303	.320
bm	4	.32250	.011733	.005867	.30383	.34117	.307	.333
p1	4	.43250	.046965	.023482	.35777	.50723	.381	.482
p2	4	.31800	.032218	.016109	.26673	.36927	.286	.357
p3	4	.36100	.071288	.035644	.24756	.47444	.315	.466
Total	24	.33912	.058480	.011937	.31443	.36382	.278	.482

ANOVA

Proliferasi						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	.053	5	.011	7.283	.001	
Within Groups	.026	18	.001			
Total	.079	23				

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Proliferasi

Tukey HSD

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
perlakuan10 koneg	dss	-.021750	.026883	.962	-.10719	.06369
	bm	-.033000	.026883	.818	-.11844	.05244
	p1	-.143000*	.026883	.001	-.22844	-.05756
	p2	-.028500	.026883	.891	-.11394	.05694
	p3	-.071500	.026883	.133	-.15694	.01394
dss	koneg	.021750	.026883	.962	-.06369	.10719
	bm	-.011250	.026883	.998	-.09669	.07419
	p1	-.121250*	.026883	.003	-.20669	-.03581
	p2	-.006750	.026883	1.000	-.09219	.07869
	p3	-.049750	.026883	.461	-.13519	.03569
bm	koneg	.033000	.026883	.818	-.05244	.11844
	dss	.011250	.026883	.998	-.07419	.09669
	p1	-.110000*	.026883	.008	-.19544	-.02456
	p2	.004500	.026883	1.000	-.08094	.08994
	p3	-.038500	.026883	.708	-.12394	.04694
p1	koneg	.143000*	.026883	.001	.05756	.22844
	dss	.121250*	.026883	.003	.03581	.20669
	bm	.110000*	.026883	.008	.02456	.19544
	p2	.114500*	.026883	.005	.02906	.19994
	p3	.071500	.026883	.133	-.01394	.15694
p2	koneg	.028500	.026883	.891	-.05694	.11394
	dss	.006750	.026883	1.000	-.07869	.09219
	bm	-.004500	.026883	1.000	-.08994	.08094
	p1	-.114500*	.026883	.005	-.19994	-.02906
	p3	-.043000	.026883	.609	-.12844	.04244
p3	koneg	.071500	.026883	.133	-.01394	.15694
	dss	.049750	.026883	.461	-.03569	.13519
	bm	.038500	.026883	.708	-.04694	.12394
	p1	-.071500	.026883	.133	-.15694	.01394
	p2	.043000	.026883	.609	-.04244	.12844

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Proliferasi

Tukey HSD^a

perlakuan10	N	Subset for alpha = .05	
		1	2
koneg	4	.28950	
dss	4	.31125	
p2	4	.31800	
bm	4	.32250	
p3	4	.36100	.36100
p1	4		.43250
Sig.		.133	.133

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

LAMPIRAN 5

Penghitungan Statistik SPSS 15.0 untuk Pengujian Pengaruh Ekstrak Buah Merah Terhadap Proliferasi Limfosit T Tanpa Menggunakan *anti-mouse* CD3 dan *anti-mouse* CD28

Oneway

Descriptives

proliferasi								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
koneg	5	.51720	.029828	.013339	.48016	.55424	.487	.553
dss	6	.53817	.055076	.022485	.48037	.59597	.474	.615
bm	6	.54733	.024993	.010203	.52110	.57356	.510	.586
p1	6	.56883	.132752	.054196	.42952	.70815	.475	.826
p2	6	.53717	.040642	.016592	.49452	.57982	.481	.588
p3	6	.55050	.064027	.026139	.48331	.61769	.477	.613
Total	35	.54394	.065712	.011107	.52137	.56652	.474	.826

ANOVA

proliferasi						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	.008	5	.002	.338	.885	
Within Groups	.139	29	.005			
Total	.147	34				

Post Hoc Tests

Multiple Comparisons

Dependent Variable: proliferasi

Tukey HSD

(I) perlakuan0	(J) perlakuan0	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
koneg	dss	-.020967	.041880	.996	-.14864	.10670
	bm	-.030133	.041880	.978	-.15780	.09754
	p1	-.051633	.041880	.817	-.17930	.07604
	p2	-.019967	.041880	.997	-.14764	.10770
	p3	-.033300	.041880	.966	-.16097	.09437
dss	koneg	.020967	.041880	.996	-.10670	.14864
	bm	-.009167	.039931	1.000	-.13090	.11256
	p1	-.030667	.039931	.971	-.15240	.09106
	p2	.001000	.039931	1.000	-.12073	.12273
	p3	-.012333	.039931	1.000	-.13406	.10940
bm	koneg	.030133	.041880	.978	-.09754	.15780
	dss	.009167	.039931	1.000	-.11256	.13090
	p1	-.021500	.039931	.994	-.14323	.10023
	p2	.010167	.039931	1.000	-.11156	.13190
	p3	-.003167	.039931	1.000	-.12490	.11856
p1	koneg	.051633	.041880	.817	-.07604	.17930
	dss	.030667	.039931	.971	-.09106	.15240
	bm	.021500	.039931	.994	-.10023	.14323
	p2	.031667	.039931	.966	-.09006	.15340
	p3	.018333	.039931	.997	-.10340	.14006
p2	koneg	.019967	.041880	.997	-.10770	.14764
	dss	-.001000	.039931	1.000	-.12273	.12073
	bm	-.010167	.039931	1.000	-.13190	.11156
	p1	-.031667	.039931	.966	-.15340	.09006
	p3	-.013333	.039931	.999	-.13506	.10840
p3	koneg	.033300	.041880	.966	-.09437	.16097
	dss	.012333	.039931	1.000	-.10940	.13406
	bm	.003167	.039931	1.000	-.11856	.12490
	p1	-.018333	.039931	.997	-.14006	.10340
	p2	.013333	.039931	.999	-.10840	.13506

Homogeneous Subsets

proliferasi

Tukey HSD^{a,b}

perlakuan0	N	Subset for alpha = .05
		1
koneg	5	.51720
p2	6	.53717
dss	6	.53817
bm	6	.54733
p3	6	.55050
p1	6	.56883
Sig.		.797

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 5.806.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

LAMPIRAN 6

Penghitungan Statistik SPSS 15.0 untuk Pengujian Pengaruh Ekstrak Buah Merah Terhadap Proliferasi Limfosit T Menggunakan *anti-mouse* CD3 dan *anti-mouse* CD28

Oneway

Descriptives

proliferasi								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
koneg	6	.53233	.042297	.017268	.48794	.57672	.456	.570
dss	6	.58950	.028275	.011543	.55983	.61917	.557	.638
bm	6	.59267	.023140	.009447	.56838	.61695	.557	.629
p1	6	.58417	.014905	.006085	.56852	.59981	.564	.605
p2	6	.55233	.020096	.008204	.53124	.57342	.528	.576
p3	6	.56883	.031263	.012763	.53602	.60164	.530	.622
Total	36	.56997	.034058	.005676	.55845	.58150	.456	.638

ANOVA

proliferasi						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	.017	5	.003	4.306	.005	
Within Groups	.024	30	.001			
Total	.041	35				

Post Hoc Tests

Multiple Comparisons

Dependent Variable: proliferasi
Tukey HSD

(I) perlakuan1	(J) perlakuan1	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
koneg	dss	-.057167*	.016206	.016	-.10646	-.00787
	bm	-.060333*	.016206	.010	-.10963	-.01104
	p1	-.051833*	.016206	.035	-.10113	-.00254
	p2	-.020000	.016206	.817	-.06929	.02929
	p3	-.036500	.016206	.245	-.08579	.01279
dss	koneg	.057167*	.016206	.016	.00787	.10646
	bm	-.003167	.016206	1.000	-.05246	.04613
	p1	.005333	.016206	.999	-.04396	.05463
	p2	.037167	.016206	.228	-.01213	.08646
	p3	.020667	.016206	.796	-.02863	.06996
bm	koneg	.060333*	.016206	.010	.01104	.10963
	dss	.003167	.016206	1.000	-.04613	.05246
	p1	.008500	.016206	.995	-.04079	.05779
	p2	.040333	.016206	.160	-.00896	.08963
	p3	.023833	.016206	.685	-.02546	.07313
p1	koneg	.051833*	.016206	.035	.00254	.10113
	dss	-.005333	.016206	.999	-.05463	.04396
	bm	-.008500	.016206	.995	-.05779	.04079
	p2	.031833	.016206	.385	-.01746	.08113
	p3	.015333	.016206	.931	-.03396	.06463
p2	koneg	.020000	.016206	.817	-.02929	.06929
	dss	-.037167	.016206	.228	-.08646	.01213
	bm	-.040333	.016206	.160	-.08963	.00896
	p1	-.031833	.016206	.385	-.08113	.01746
	p3	-.016500	.016206	.908	-.06579	.03279
p3	koneg	.036500	.016206	.245	-.01279	.08579
	dss	-.020667	.016206	.796	-.06996	.02863
	bm	-.023833	.016206	.685	-.07313	.02546
	p1	-.015333	.016206	.931	-.06463	.03396
	p2	.016500	.016206	.908	-.03279	.06579

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

proliferasi

Tukey HSD^a

perlakuan1	N	Subset for alpha = .05	
		1	2
koneg	6	.53233	
p2	6	.55233	.55233
p3	6	.56883	.56883
p1	6		.58417
dss	6		.58950
bm	6		.59267
Sig.		.245	.160

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

LAMPIRAN 7**Perhitungan Dosis****§ Dosis Buah Merah**

$$\text{Dosis manusia 70 kg} = 30 \text{ cc}$$

$$\text{Dosis untuk mencit 20 g} = 30 \text{ cc} \times 0,0026 = 0,078 \text{ cc}$$

$$\text{Dosis untuk mencit 24 g} = \frac{24}{20} \times 0,078 \text{ cc} = 0,0936 \text{ cc} \quad 0,1 \text{ cc}$$

§ Dextran Sulphate Sodium

Garam DSS yang dipakai adalah 2,5 g dilarutkan dengan aquadest 100 ml sehingga didapatkan larutan DSS 2,5%.

Larutan ini diberikan melalui air minum pada mencit.

LAMPIRAN 8**Foto Alat dan Bahan**

MACS Separation Column



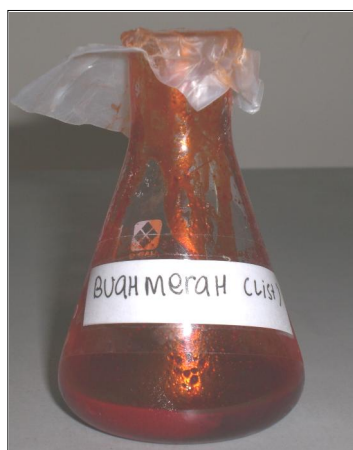
Inkubator CO₂



Sentrifuga Suhu Dingin



ELISA Reader, BioRad



Ekstrak Buah Merah



RPMI-complete

Foto Penelitian

Pemberian ekstrak Buah Merah per oral



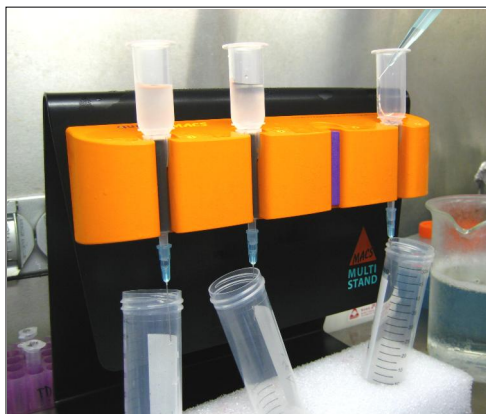
Limpa yang akan digerus



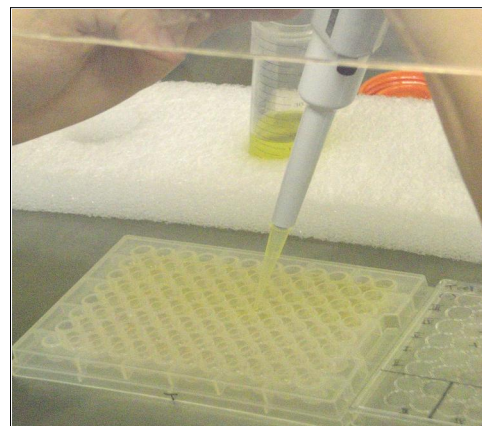
Pengerusan limpa



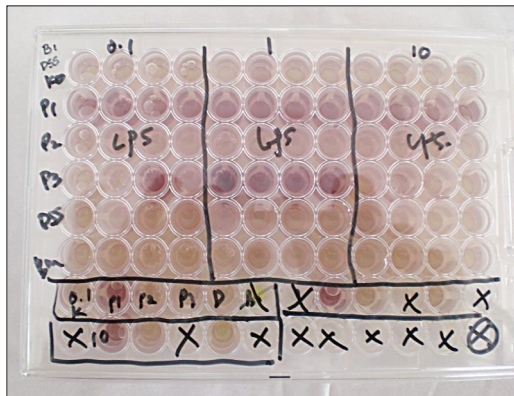
Tabung falcon yang akan disentrifuga



Penyortiran sel leukosit



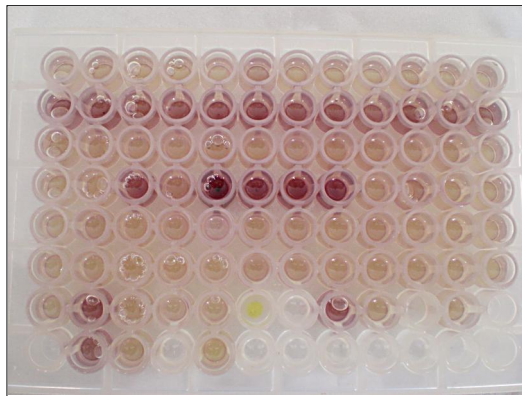
Penambahan Reagen MTT



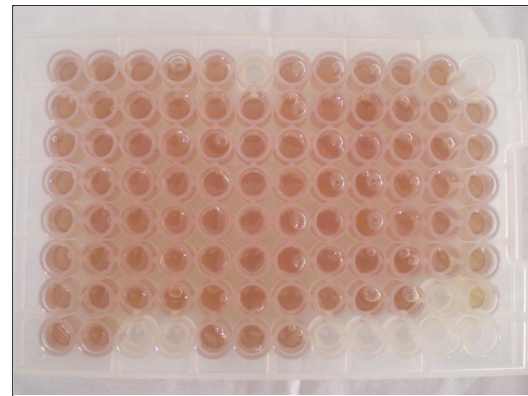
ELISA culture plate
sel leukosit non-T



ELISA culture plate
limfosit T



ELISA culture plate
sel leukosit non-T



ELISA culture plate
limfosit T

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Karya Tulis Ilmiah yang Pernah Dibuat:
Pengaruh Pemberian Aluminium Sebagai Faktor Risiko Penyakit
Alzheimer Terhadap Jaringan Otak Mencit