

BAB 5

SIMPULAN

5.1. Simpulan

1. Senyawa O-(isoleusil)parasetamol memiliki aktivitas antipiretik pada mencit (*Mus musculus*) dengan nilai ED₉₀ 126 mg/kg BB.
2. Senyawa O-(isoleusil)parasetamol mempunyai aktivitas antipiretik yang sama parasetamol.

5.2. Alur Penelitian Selanjutnya

Dilakukan studi lebih lanjut untuk mendapatkan data serta informasi yang lebih lengkap, baik dari aspek farmakodinamika, farmakokinetika dan efek samping hepatotoksik bila dibandingkan dengan parasetamol, untuk dapat dikembangkan lebih lanjut sebagai calon obat baru.

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LAMPIRAN A

HASIL PENGAMATAN PENURUNAN SUHU MENCIT PADA KELOMPOK SENYAWA UJI O-(ISOLEUSIL)PARASETAMOL DAN SENYAWA PEMBANDING PARASETAMOL

Senyawa Pembanding Parasetamol 25 mg/kg BB

Mencit	Suhu Normal	T(°C)										Rerata Suhu	SD	Penurunan Suhu
		0	15	30	45	60	75	90	105	120				
1	35,8	37,8	36,9	36,8	36,3	35,9	36,7	36,8	36,7	37,0	36,64	0,36	1,16	
2	35,5	37,5	37,5	36,7	36,6	35,8	36,3	36,2	36,6	36,3	36,50	0,50	1,00	
3	36,0	38,0	37,9	37,5	36,8	36,1	36,2	36,4	36,5	36,7	36,76	0,63	1,24	
4	35,9	37,9	37,7	37,5	36,8	36,3	36,1	36,1	36,2	36,2	36,61	0,65	1,29	
5	36,2	38,2	37,7	37,5	37,0	36,8	36,6	36,9	37,0	37,3	37,10	0,37	1,10	

Senyawa Pembanding Parasetamol 50 mg/kg BB

Mencit	Suhu Normal	T (°C)									Rerata Suhu	SD	Penurunan Suhu
		0	15	30	45	60	75	90	105	120			
1	35,7	37,7	37,5	37,2	36,8	36,0	36,1	36,2	36,2	36,3	36,54	0,56	1,16
2	35,8	37,8	37,6	37,5	36,2	36,4	36,1	36,2	36,2	36,0	36,53	0,64	1,28
3	35,5	37,5	37,3	37,3	36,8	36,6	36,2	36,0	35,9	35,7	36,48	0,62	1,03
4	35,9	37,9	37,7	37,0	36,6	36,2	36,4	36,3	36,7	36,6	36,69	0,48	1,21
5	36,2	38,2	37,9	37,8	37,2	36,4	36,8	36,4	36,4	36,0	36,86	0,70	1,34

Senyawa Pembanding Parasetamol 100 mg/kg BB

Mencit	Suhu Normal	T (°C)									Rerata Suhu	SD	Penurunan Suhu
		0	15	30	45	60	75	90	105	120			
1	35,9	37,9	37,3	37,1	36,4	36,0	36,1	36,2	36,2	36,2	36,44	0,49	1,46
2	35,8	37,8	37,2	36,9	36,2	36,4	36,2	36,2	36,0	35,8	36,36	0,47	1,44
3	35,7	37,7	36,8	36,4	35,6	35,9	36,2	36,0	36,2	35,6	36,09	0,41	1,61
4	36,1	38,1	36,9	36,4	36,5	36,1	36,4	36,0	35,9	36,4	36,33	0,32	1,78
5	35,9	37,9	36,9	36,3	36,0	36,3	36,0	35,7	35,9	36,0	36,14	0,37	1,76

Senyawa Pembanding Parasetamol 200 mg/kg BB

Mencit	Suhu Normal	T (°C)									Rerata Suhu	SD	Penurunan Suhu
		0	15	30	45	60	75	90	105	120			
1	36.1	38.1	37.3	36.2	36.2	35.8	35.8	35.9	35.7	35.7	36.08	0.53	2.03
2	35.9	38.0	37.0	36.8	36.4	36.2	36.2	35.8	35.9	35.7	36.25	0.47	1.75
3	35.7	37.7	36.7	36.1	35.7	35.8	36.0	35.9	35.7	35.7	35.95	0.34	1.75
4	36.3	38.3	37.6	36.9	36.0	35.9	36.2	36.1	36.1	35.9	36.34	0.60	1.96
5	36.1	38.1	37.8	36.7	36.6	36.2	35.9	36.3	35.8	35.9	36.40	0.65	1.70

Senyawa Uji O-(isoleusil)parasetamol 25 mg/kg BB

Mencit	Suhu Normal	T (°C)										Rerata Suhu	SD	Penurunan Suhu
		0	15	30	45	60	75	90	105	120				
1	36.0	38.0	37.4	37.4	37.5	37.0	36.7	36.4	36.4	36.0	36.85	0.65	1.15	
2	36.1	38.1	37.6	37.5	37.4	37.2	36.9	36.7	36.5	36.2	37.0	0.60	1.10	
3	35.6	37.7	37.2	37.1	36.9	36.7	36.6	36.3	36.0	35.7	36.56	0.62	1.14	
4	35.9	38.0	37.6	37.5	37.4	36.8	36.7	36.5	36.1	36.0	36.83	0.70	1.18	
5	35.8	37.8	37.3	37.1	37.0	36.9	36.6	36.4	36.0	35.9	36.65	0.62	1.15	

Senyawa Uji O-(isoleusil)parasetamol 50 mg/kg BB

Mencit	Suhu Normal	T (°C)									Rerata Suhu	SD	Penurunan Suhu
		0	15	30	45	60	75	90	105	120			
1	35.7	37.9	36.9	36.6	36.5	35.9	35.9	35.7	35.7	35.7	36.11	0.75	1.79
2	36.0	38.0	37.1	36.8	36.7	36.5	36.3	36.2	36.1	36.0	36.46	0.62	1.54
3	35.6	37.8	37.0	36.8	36.6	36.4	36.1	35.8	35.8	35.6	36.26	0.70	1.54
4	36.1	38.1	37.5	37.2	36.8	36.5	36.4	36.2	36.2	36.1	36.61	0.69	1.49
5	35.8	38.0	37.4	36.9	36.6	36.3	36.0	35.9	35.8	35.8	36.34	0.78	1.66

Senyawa Uji O-(isoleusil)parasetamol 100 mg/kg BB

Mencit	Suhu Normal	T (°C)									Rerata Suhu	SD	Penurunan Suhu
		0	15	30	45	60	75	90	105	120			
1	35.6	38.0	36.7	36.4	36.1	36.0	35.8	35.7	35.6	35.6	35.99	0.77	2.01
2	36.0	38.0	37.8	36.5	36.4	36.0	35.7	35.9	35.8	35.8	36.24	0.88	1.76
3	35.4	37.4	37.0	36.7	36.6	36.4	36.3	36.1	35.8	35.5	36.30	0.59	1.10
4	36.1	38.2	36.8	36.7	36.5	36.4	36.4	36.3	36.1	36.1	36.41	0.64	1.79
5	36.7	38.0	37.1	36.8	36.7	36.4	36.0	35.9	35.7	35.7	36.29	0.76	1.71

Senyawa Uji O-(isoleusil)parasetamol 200 mg/kg BB

Mencit	Suhu Normal	T (°C)										Rerata Suhu	SD	Penurunan Suhu
		0	15	30	45	60	75	90	105	120				
1	35.7	38.0	36.7	36.3	35.9	36.0	36.0	35.9	35.7	35.7	36.03	0.73	1.98	
2	36.2	38.2	37.0	36.5	36.5	36.4	36.3	36.3	36.2	36.2	36.43	0.64	1.78	
3	35.6	37.9	36.7	36.5	36.0	35.8	35.7	35.7	35.6	35.6	35.95	0.76	1.95	
4	35.7	38.0	36.9	36.6	36.5	36.2	35.8	35.8	35.7	35.7	36.15	0.76	1.85	
5	36.0	38.1	37.2	37.0	36.7	36.4	36.3	36.1	36.0	36.0	36.46	0.69	1.64	

LAMPIRAN B

HASIL UJI *ONE WAY* ANOVA DAN UJI HSD PENURUNAN SUHU TUBUH MENCIT ANTARA KELOMPOK UJI O- (ISOLEUSIL)PARASETAMOL, SENYAWA PEMBANDING PARASETAMOL DAN KONTROL

ANOVA

Penurunan_Suhu

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13.790	10	1.379	57.538	.000
Within Groups	1.055	44	.024		
Total	14.844	54			

Multiple Comparisons

Penurunan_Suhu

Tukey HSD

(I) Senyawa	(J) Senyawa	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
kontrol	Parasetamol 12,5 mg/kgBB	-.58580 ^a	0.0979	0	-0.918	-. 0.2536
	Parasetamol 25 mg/kgBB	-.99340 ^a	0.0979	0	1.3256	-. 0.6612
	Parasetamol 50 mg/kgBB	-1.03880 ^a	0.0979	0	-1.371	-. 0.7066
	Parasetamol 100 mg/kgBB	-1.44640 ^a	0.0979	0	1.7786	-. 1.1142
	Parasetamol 200 mg/kgBB	-1.67360 ^a	0.0979	0	2.0058	-. 1.3414

	O-(isoleusil)parasetamol 12,5 mg/kgBB	-.67620*	0.0979	0	- 1.0084	-0.344
	O-(isoleusil)parasetamol 25 mg/kgBB	-.97860*	0.0979	0	- 1.3108	- 0.6464
	O-(isoleusil)parasetamol 50 mg/kgBB	-1.43860*	0.0979	0	- 1.7708	- 1.1064
	O-(isoleusil)parasetamol 100 mg/kgBB	-1.52640*	0.0979	0	- 1.8586	- 1.1942
	O-(isoleusil)parasetamol 200 mg/kgBB	-1.67360*	0.0979	0	- 2.0058	- 1.3414
Parasetamol 12,5 mg/kgBB	kontrol	.58580*	0.0979	0	0.2536	0.918
	Parasetamol 25 mg/kgBB	-.40760*	0.0979	0.006	- 0.7398	- 0.0754
	Parasetamol 50 mg/kgBB	-.45300*	0.0979	0.001	- 0.7852	- 0.1208
	Parasetamol 100 mg/kgBB	-.86060*	0.0979	0	- 1.1928	- 0.5284
	Parasetamol 200 mg/kgBB	-1.08780*	0.0979	0	-1.42	- 0.7556
	O-(isoleusil)parasetamol 12,5 mg/kgBB	-0.0904	0.0979	0.997	- 0.4226	- 0.2418
	O-(isoleusil)parasetamol 25 mg/kgBB	-.39280*	0.0979	0.009	-0.725	- 0.0606
	O-(isoleusil)parasetamol 50 mg/kgBB	-.85280*	0.0979	0	-1.185	- 0.5206
	O-(isoleusil)parasetamol 100 mg/kgBB	-.94060*	0.0979	0	- 1.2728	- 0.6084
	O-(isoleusil)parasetamol 200 mg/kgBB	-1.08780*	0.0979	0	-1.42	- 0.7556
Parasetamol 25 mg/kgBB	kontrol	.99340*	0.0979	0	0.6612	1.3256
	Parasetamol 12,5 mg/kgBB	.40760*	0.0979	0.006	0.0754	0.7398
	Parasetamol 50 mg/kgBB	-0.0454	0.0979	1	- 0.3776	0.2868
	Parasetamol 100 mg/kgBB	-.45300*	0.0979	0.001	- 0.7852	- 0.1208
	Parasetamol 200 mg/kgBB	-.68020*	0.0979	0	- 1.0124	-0.348
	O-(isoleusil)parasetamol 12,5 mg/kgBB	0.3172	0.0979	0.073	-0.015	0.6494
	O-(isoleusil)parasetamol 25 mg/kgBB	0.0148	0.0979	1	- 0.3174	0.347

	O-(isoleusil)parasetamol 50 mg/kgBB	-.44520*	0.0979	0.002	- 0.7774	-0.113
	O-(isoleusil)parasetamol 100 mg/kgBB	-.53300*	0.0979	0	- 0.8652	- 0.2008
	O-(isoleusil)parasetamol 200 mg/kgBB	-.68020*	0.0979	0	- 1.0124	- -0.348
Parasetamol 50 mg/kgBB	kontrol	1.03880*	0.0979	0	0.7066	1.371
	Parasetamol 12,5 mg/kgBB	.45300*	0.0979	0.001	0.1208	0.7852
	Parasetamol 25 mg/kgBB	0.0454	0.0979	1	- 0.2868	0.3776
	Parasetamol 100 mg/kgBB	-.40760*	0.0979	0.006	- 0.7398	- 0.0754
	Parasetamol 200 mg/kgBB	-.63480*	0.0979	0	- -0.967	- 0.3026
	O-(isoleusil)parasetamol 12,5 mg/kgBB	.36260*	0.0979	0.022	0.0304	0.6948
	O-(isoleusil)parasetamol 25 mg/kgBB	0.0602	0.0979	1	-0.272	0.3924
	O-(isoleusil)parasetamol 50 mg/kgBB	-.39980*	0.0979	0.008	-0.732	- 0.0676
	O-(isoleusil)parasetamol 100 mg/kgBB	-.48760*	0.0979	0	- 0.8198	- 0.1554
	O-(isoleusil)parasetamol 200 mg/kgBB	-.63480*	0.0979	0	- -0.967	- 0.3026
Parasetamol 100 mg/kgBB	kontrol	1.44640*	0.0979	0	1.1142	1.7786
	Parasetamol 12,5 mg/kgBB	.86060*	0.0979	0	0.5284	1.1928
	Parasetamol 25 mg/kgBB	.45300*	0.0979	0.001	0.1208	0.7852
	Parasetamol 50 mg/kgBB	.40760*	0.0979	0.006	0.0754	0.7398
	Parasetamol 200 mg/kgBB	-0.2272	0.0979	0.439	- 0.5594	0.105
	O-(isoleusil)parasetamol 12,5 mg/kgBB	.77020*	0.0979	0	0.438	1.1024
	O-(isoleusil)parasetamol 25 mg/kgBB	.46780*	0.0979	0.001	0.1356	0.8
	O-(isoleusil)parasetamol 50 mg/kgBB	0.0078	0.0979	1	- 0.3244	0.34
	O-(isoleusil)parasetamol 100 mg/kgBB	-0.08	0.0979	0.999	- 0.4122	0.2522

O-(isoleusil)parasetamol 200 mg/kgBB		-0.2272	0.0979	0.439	- 0.5594	0.105
Parasetamol 200 mg/kgBB	kontrol	1.67360 [*]	0.0979	0	1.3414	2.0058
	Parasetamol 12,5 mg/kgBB	1.08780 [*]	0.0979	0	0.7556	1.42
	Parasetamol 25 mg/kgBB	.68020 [*]	0.0979	0	0.348	1.0124
	Parasetamol 50 mg/kgBB	.63480 [*]	0.0979	0	0.3026	0.967
	Parasetamol 100 mg/kgBB	0.2272	0.0979	0.439	-0.105	0.5594
	O-(isoleusil)parasetamol 12,5 mg/kgBB	.99740 [*]	0.0979	0	0.6652	1.3296
	O-(isoleusil)parasetamol 25 mg/kgBB	.69500 [*]	0.0979	0	0.3628	1.0272
	O-(isoleusil)parasetamol 50 mg/kgBB	0.235	0.0979	0.39	- 0.0972	0.5672
	O-(isoleusil)parasetamol 100 mg/kgBB	0.1472	0.0979	0.911	-0.185	0.4794
	O-(isoleusil)parasetamol 200 mg/kgBB	0	0.0979	1	- 0.3322	0.3322
O- (isoleusil)paraset amol 12,5 mg/kgBB	kontrol	.67620 [*]	0.0979	0	0.344	1.0084
	Parasetamol 12,5 mg/kgBB	0.0904	0.0979	0.997	- 0.2418	0.4226
	Parasetamol 25 mg/kgBB	-0.3172	0.0979	0.073	- 0.6494	0.015
	Parasetamol 50 mg/kgBB	-.36260 [*]	0.0979	0.022	- 0.6948	- 0.0304
	Parasetamol 100 mg/kgBB	-.77020 [*]	0.0979	0	- 1.1024	- -0.438
	Parasetamol 200 mg/kgBB	-.99740 [*]	0.0979	0	- 1.3296	- 0.6652
	O-(isoleusil)parasetamol 25 mg/kgBB	-0.3024	0.0979	0.104	- 0.6346	- 0.0298
	O-(isoleusil)parasetamol 50 mg/kgBB	-.76240 [*]	0.0979	0	- 1.0946	- 0.4302
	O-(isoleusil)parasetamol 100 mg/kgBB	-.85020 [*]	0.0979	0	- 1.1824	- -0.518
	O-(isoleusil)parasetamol 200 mg/kgBB	-.99740 [*]	0.0979	0	- 1.3296	- 0.6652
O- (isoleusil)paraset	kontrol	.97860 [*]	0.0979	0	0.6464	1.3108

amol 25 mg/kgBB	Parasetamol 12,5 mg/kgBB	.39280 [*]	0.0979	0.009	0.0606	0.725
	Parasetamol 25 mg/kgBB	-0.0148	0.0979	1	-0.347	0.3174
	Parasetamol 50 mg/kgBB	-0.0602	0.0979	1	-	0.272
	Parasetamol 100 mg/kgBB	-.46780 [*]	0.0979	0.001	-0.8	-
	Parasetamol 200 mg/kgBB	-.69500 [*]	0.0979	0	-	-
	O-(isoleusil)parasetamol 12,5 mg/kgBB	0.3024	0.0979	0.104	1.0272	0.3628
	O-(isoleusil)parasetamol 50 mg/kgBB	-.46000 [*]	0.0979	0.001	-	0.6346
	O-(isoleusil)parasetamol 100 mg/kgBB	-.54780 [*]	0.0979	0	0.7922	-
	O-(isoleusil)parasetamol 200 mg/kgBB	-.69500 [*]	0.0979	0	-0.88	-
O- (isoleusil)paraset amol 50 mg/kgBB	kontrol	1.43860 [*]	0.0979	0	-	0.2156
	Parasetamol 12,5 mg/kgBB	.85280 [*]	0.0979	0	1.0272	0.3628
	Parasetamol 25 mg/kgBB	.44520 [*]	0.0979	0.002	-	-
	Parasetamol 50 mg/kgBB	.39980 [*]	0.0979	0.008	0.0298	0.6346
	Parasetamol 100 mg/kgBB	-0.0078	0.0979	1	-	-
	Parasetamol 200 mg/kgBB	-0.235	0.0979	0.39	-0.34	-
	O-(isoleusil)parasetamol 12,5 mg/kgBB	.76240 [*]	0.0979	0	0.0676	0.732
	O-(isoleusil)parasetamol 25 mg/kgBB	.46000 [*]	0.0979	0.001	0.3244	0.3244
	O-(isoleusil)parasetamol 100 mg/kgBB	-0.0878	0.0979	0.998	0.5672	0.0972
	O-(isoleusil)parasetamol 200 mg/kgBB	-0.235	0.0979	0.39	-	-
O- (isoleusil)paraset amol 100 mg/kgBB	kontrol	1.52640 [*]	0.0979	0	0.4302	1.0946
	Parasetamol 12,5 mg/kgBB	.94060 [*]	0.0979	0	0.1278	0.7922
	Parasetamol 25 mg/kgBB	.53300 [*]	0.0979	0	-0.42	0.2444

	Parasetamol 50 mg/kgBB	.48760*	0.0979	0	0.1554	0.8198
	Parasetamol 100 mg/kgBB	0.08	0.0979	0.999	- 0.2522	0.4122
	Parasetamol 200 mg/kgBB	-0.1472	0.0979	0.911	- 0.4794	0.185
	O-(isoleusil)parasetamol 12,5 mg/kgBB	.85020*	0.0979	0	0.518	1.1824
	O-(isoleusil)parasetamol 25 mg/kgBB	.54780*	0.0979	0	0.2156	0.88
	O-(isoleusil)parasetamol 50 mg/kgBB	0.0878	0.0979	0.998	- 0.2444	0.42
	O-(isoleusil)parasetamol 200 mg/kgBB	-0.1472	0.0979	0.911	- 0.4794	0.185
O- (isoleusil)paraset amol 200 mg/kgBB	kontrol	1.67360*	0.0979	0	1.3414	2.0058
	Parasetamol 12,5 mg/kgBB	1.08780*	0.0979	0	0.7556	1.42
	Parasetamol 25 mg/kgBB	.68020*	0.0979	0	0.348	1.0124
	Parasetamol 50 mg/kgBB	.63480*	0.0979	0	0.3026	0.967
	Parasetamol 100 mg/kgBB	0.2272	0.0979	0.439	-0.105	0.5594
	Parasetamol 200 mg/kgBB	0	0.0979	1	- 0.3322	0.3322
	O-(isoleusil)parasetamol 12,5 mg/kgBB	.99740*	0.0979	0	0.6652	1.3296
	O-(isoleusil)parasetamol 25 mg/kgBB	.69500*	0.0979	0	0.3628	1.0272
	O-(isoleusil)parasetamol 50 mg/kgBB	0.235	0.0979	0.39	- 0.0972	0.5672
	O-(isoleusil)parasetamol 100 mg/kgBB	0.1472	0.0979	0.911	-0.185	0.4794

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

LAMPIRAN C

**PERHITUNGAN PERSENTASE PENURUNAN SUHU SENYAWA
UJI O(ISOLEUSIL)PARASETAMOL DAN SENYAWA
PEMBANDING PARASETAMOL**

$$\% \text{ Penurunan Suhu} = \frac{T_t - T_k}{T_t} \times 100\%$$

Keterangan :

Tk : Penurunan suhu tubuh rata-rata pada kelompok kontrol

Tt : Penurunan suhu tubuh rata-rata pada kelompok senyawa uji atau pembanding

a. Senyawa O-(isoleusil)parasetamol :

Dosis 200 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{1,84 - 0,16}{1,84} \times 100\% = 91,29\%$$

Dosis 100 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{1,68 - 0,16}{1,68} \times 100\% = 90,45\%$$

Dosis 50 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{1,60 - 0,16}{1,60} \times 100\% = 90,02\%$$

Dosis 25 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{1,14 - 0,16}{1,14} \times 100\% = 86,00\%$$

Dosis 12,5 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{0,84 - 0,16}{0,84} \times 100\% = 80,95\%$$

b. Senyawa Parasetamol :

Dosis 200 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{1,84 - 0,16}{1,84} \times 100\% = 91,17\%$$

Dosis 100 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{1,61 - 0,16}{1,61} \times 100\% = 89,92\%$$

Dosis 50 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{1,20 - 0,16}{1,20} \times 100\% = 86,51\%$$

Dosis 25 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{1,16 - 0,16}{1,16} \times 100\% = 85,98\%$$

Dosis 12,5 mg/kg BB

$$\% \text{ Penurunan Suhu} = \frac{0,75 - 0,16}{0,75} \times 100\% = 78,37\%$$

LAMPIRAN D

ANALISIS PROBIT

O-(isoleusil)parasetamol

Data Information

		N of Cases
Valid		5
Rejected	Missing	0
	Number of Responses >	0
	Number of Subjects	
Control Group		0

Parameter Estimates

Parameter	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PROBIT ^a Dosis_Isol eusil	0.002	0.001	1.938	0.053	0	0.004
Intercept	1.005	0.106	9.451	0	0.898	1.111

a. PROBIT model: PROBIT(p) = Intercept + BX

Cell Counts and Residuals

Number	Dosis_Isol eusil	Number of Subjects	Observed Responses	Expected Responses	Residual	Probability
PROBIT	1	100	81	84.897	-3.947	0.849
	2	100	86	85.532	0.468	0.855
	3	100	90	86.747	3.273	0.867
	4	100	90	88.961	1.489	0.89
	5	100	91	92.568	-1.278	0.926

Confidence Limits

		95% Confidence Limits for Dosis_Isoleusil		
	Probability	Estimate	Lower Bound	Upper Bound
PROBIT	.010	-1514.652	.	.
	.020	-1390.693	.	.
	.030	-1312.046	.	.
	.040	-1252.882	.	.
	.050	-1204.757	.	.
	.060	-1163.795	.	.
	.070	-1127.880	.	.
	.080	-1095.722	.	.
	.090	-1066.475	.	.
	.100	-1039.554	.	.
	.150	-928.091	.	.
	.200	-839.505	.	.
	.250	-763.505	.	.
	.300	-695.256	.	.
	.350	-632.012	.	.
	.400	-572.000	.	.
	.450	-513.938	.	.
	.500	-456.796	.	.
	.550	-399.654	.	.
	.600	-341.592	.	.
	.650	-281.580	.	.
	.700	-218.336	.	.
	.750	-150.086	.	.
	.800	-74.087	.	.
	.850	14.499	.	.
	.900*	125.962	.	.
	.910	152.883	.	.

.920	182.130	.	.
.930	214.288	.	.
.940	250.203	.	.
.950	291.165	.	.
.960	339.290	.	.
.970	398.454	.	.
.980	477.102	.	.
.990	601.060	.	.

Parasetamol

Data Information

		N of Cases
Valid		5
Rejected	Missing	0
	Number of Responses >	0
	Number of Subjects	
Control Group		0

Parameter Estimates

Parameter	Estimate	Std. Error	Z	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PROBIT ^a Dosis_parasetamol	0.003	0.001	2.298	0.022	0	0.005
Intercept	0.923	0.104	8.9	0	0.82	1.027

a. PROBIT model: PROBIT(p) = Intercept + BX

Cell Counts and Residuals

Number	Dosis_par asetamol	Number of Subjects	Observed Responses	Expected Responses	Residual	Probability	
PROBIT	1	12.5	100	79	83.034	-4.364	0.83
	2	25	100	86	83.838	2.332	0.838
	3	50	100	87	85.368	1.322	0.854
	4	100	100	90	88.13	1.93	0.881
	5	200	100	91	92.503	-1.213	0.925

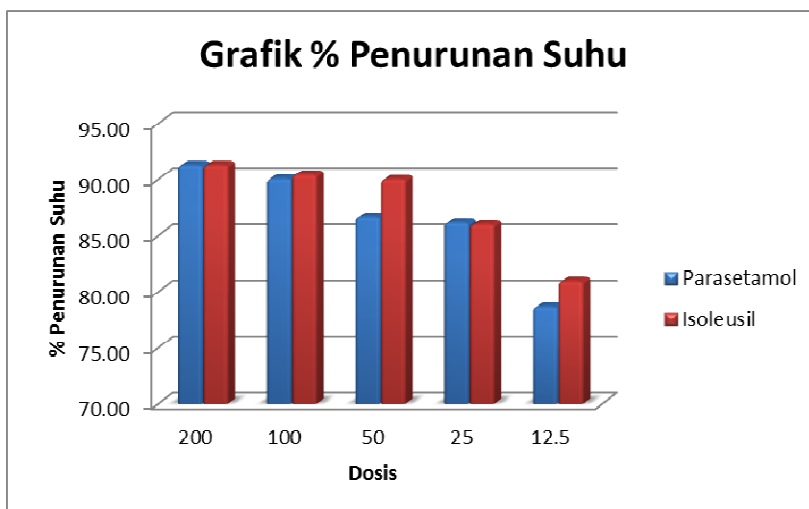
Confidence Limits

		95% Confidence Limits for Dosis_parasetamol		
	Probability	Estimate	Lower Bound	Upper Bound
PROBIT	.010	-1258.257	-8937.823	-646.864
	.020	-1152.705	-8220.967	-589.784
	.030	-1085.736	-7766.155	-553.557
	.040	-1035.358	-7424.024	-526.299
	.050	-994.379	-7145.732	-504.122
	.060	-959.499	-6908.866	-485.242
	.070	-928.917	-6701.183	-468.685
	.080	-901.534	-6515.231	-453.857
	.090	-876.630	-6346.117	-440.370
	.100	-853.706	-6190.450	-427.952
	.150	-758.795	-5545.973	-376.513
	.200	-683.363	-5033.801	-335.593
	.250	-618.649	-4594.440	-300.451
	.300	-560.533	-4199.917	-268.855
	.350	-506.681	-3834.374	-239.536
	.400	-455.580	-3487.558	-211.666
	.450	-406.139	-3152.069	-184.642
	.500	-357.482	-2821.975	-157.970
	.550	-308.826	-2491.987	-131.192
	.600	-259.385	-2156.840	-103.827
	.650	-208.284	-1810.693	-75.288
	.700	-154.432	-1446.378	-44.740
	.750	-96.316	-1054.293	-10.706
	.800	-31.602	-621.182	30.686
	.850	43.830	-145.310	107.906
	.900*	138.742	83.162	575.350
	.910	161.665	100.695	725.902
	.920	186.569	117.647	891.551

.930	213.952	134.973	1075.005
.940	244.535	153.422	1280.796
.950	279.414	173.794	1516.170
.960	320.393	197.192	1793.241
.970	370.771	225.488	2134.334
.980	437.741	262.641	2588.219
.990	543.293	320.625	3304.171

LAMPIRAN E
DATA & GRAFIK PENURUNAN SUHU

Kelompok	Penurunan Suhu	% Penurunan Suhu
Kontrol	0.16	
Parasetamol 200	1.84	91.29
Parasetamol 100	1.61	90.06
Parasetamol 50	1.20	86.69
Parasetamol 25	1.16	86.17
Parasetamol 12.5	0.75	78.67
O-(Isoleusil)parasetamol 200	1.84	91.29
O-(Isoleusil)parasetamol 100	1.68	90.45
O-(Isoleusil)parasetamol 50	1.60	90.02
O-(Isoleusil)parasetamol 25	1.14	86.00
O-(Isoleusil)parasetamol 12.5	0.84	80.95



LAMPIRAN F
DOKUMENTASI PENELITIAN



LAMPIRAN G

SERTIFIKAT PARASETAMOL

FROM : PT BRATACO

FAX NO. 10218934659

29 Apr. 2012 11:47PM P1

BTC 587 6/2 - 2012
BTC 584 30/4 - 2012

PT. BRATACO
HASIL PEMERIKSAAN



Nama Bahan : Parasetamol
No Batch : J 0920711 (1009053)
Ex : Hengshui Jiheng
E.D : 09/2014
Grade : farma

Jenis Pemeriksaan : Persyaratan FIV

		Hasil
Pemerian	Gerbuk hablur, putih, tidak berbau, rasa pahit	sesuai
Kelarutan	Larut dalam air mendidih, mudah larut dalam etanol	sesuai
Suhu Lebur	168°C - 172°C	169.3 - 170.3°C
Susut Pengeringan	Tidak lebih dari 0.5%	0.2%
Kadar	98.0 % - 101.0%	99.5 %

Kesimpulan : Memenuhi Syarat

Pemeriksa

[Signature]
Tatang Subartono
Analisis

Cikarang, 28-09-2011
Penanggung Jawab



HEAD OFFICE
BRANCH OFFICE

Jl. Cikarang Barat No. 78, Cikarang Pusat 10110, Telp. (021) 5827323 (tunting) Fax: (021) 5827334, Email: jstano@brataco.com
JAKARTAJl. Mangrove Besar V No 5, Jakarta 11180, Telp. (021) 62900113 (tuning 5 line) Fax: (021) 6292430
Jl. Boulevard Raya SRA 1162 No. 5, Jakarta 14240 Telp. (021) 4346082-84 Fax: (021) 4332815

LAMPIRAN H

SERTIFIKAT SENYAWA UJI O-(ISOLEUSIL)PARASETAMOL

Laporan Hasil Pemeriksaan Senyawa

1. Nama senyawa : O-(Isoleusil)parasetamol
2. Dibuat oleh : Siswandono
3. Tanggal dibuat : 10 Juli 2012
4. Rendemen : 32%
5. Pemeriksaan :

No.	Jenis Pemeriksaan	Hasil Pemeriksaan
1. 2. 3. 4.	Pemerian/Organoleptis Jarak lebur Kelarutan Uji KLT(3 eluen)	Amorf, warna coklat, berbau. 176-178°C. etanol, aseton, dimetilsulfoksida. 1 noda.
5.	Spektrum IR : ν (cm ⁻¹) Dalam pelet KBr	3338 (-NH amida); 2971 (-NH ₂); 1735 (-C=O ester) & 1654 (-C=O amida); 1513 (-C=C- aromatis);
6.	Spektrum ¹ H NMR : δ (ppm) Dalam pelarut DMSO-D ₆	9,74, s, (-NH); 8,43, s, (-NH ₂); 7,37, d, (-CH=CH- aromatis); 6,64, d, (-CH=CH- aromatis); 3,76, m, (- CH-); 2,16, m, (-CH-); 1,97, s, (-CH ₃); 1,28, m, (- CH ₂); 1,23, m, (-CH ₃); 1,17, m, (-CH ₃).

Kesimpulan : Senyawa adalah O-(Isoleusil)parasetamol.

Surabaya, 2 Agustus 2012

Mengetahui:
Ketua Departemen Kimia Farmasi
Fakultas Farmasi Unair


Marcellino Rudyanto, M.Si, Ph.D
NIP. 19660518 199203 1 002

Ketua Peneliti,



Prof. Dr. Siswandono, M.S.

LAMPIRAN I

KETERANGAN PEPTON (Merck)

(PEPTONE FROM MEAT/PEPTIC)



1.07224 Peptone from Meat (Peptic)
Granulated

For general questions please contact our
Customer Service:

EMD Millipore
290 Concord Road
01821 Billerica, MA
United States
Phone: 781 533-6000
Fax: +49 6151 72 2000
E-mail:
Customer.CareDesk@emdchemicals.com

22 January 2013

1.07224 Peptone from Meat (Peptic)
Granulated

For general questions please contact our
Customer Service:

EMD Millipore
290 Concord Road
01821 Billerica, MA
United States
Phone: 781 533-6000
Fax: +49 6151 72 2000
E-mail:
Customer.CareDesk@emdchemicals.com

22 January 2013



Peptone from Meat (Peptic)
1.07224.0201 10g Pouch, Box of 20

Product number	Packaging	Qty/Pk	Price	Delivery Date
			Please login to see your account specific pricing.	
1.07224.0201	20 Pouches per Pack	1 pac	USD 87.89	
1.07224.1000	Poly Bottle	1 kg	USD 175.97	
1.07224.2500	Poly Bottle	2.5 kg	USD 425.40	

Prices are subject to change without notice.

Product information	
Chemical formula	Mixture
Suitability	For Microbiology
Comments	In the .0201 package size, each pouch contains a preweighed quantity of Peptone sufficient for preparing 1 liter of culture media..Each pouch contains 10.00g of media.

Specifications	
Amino nitrogen (as N)	3.0-5.0%
Appearance	Light brownish-yellow granulate
Expiration date	Exp 60 months from mfg date
Loss on drying (105°C)	6.0% max
Nitrite (NO ₂)	Passes test
pH (5%, water)	6.5-7.5
Suitability for microbiology	Passes test
Sulfated ash (800°C)	15.0% max
Test date	Per Merck CoFA
Total nitrogen (N)	11.0-14.0%

Supplemental information	
Application	Peptone from meat (peptic) is obtained by proteolytic digestion of meat with pepsin. Can be used to prepare rinsing/dilution fluids.
Suitability	For Microbiology
Reference methods	AOAC APHA BAM EP SMWW USDA USP(Fluid A & D)

© Merck KGaA, Darmstadt, Germany. Customer.CareDesk(at)emdcchemicals.com, 2013
All references to Merck refer to Merck KGaA, Darmstadt, Germany.

LAMPIRAN J

SURAT KETERANGAN HEWAN COBA

SURAT KETERANGAN

Yang bertanda tangan di bawah ini :

Nama : Heri Soemantoro

Selaku kordinator Pengembangan Hewan Coba Departemen Biokimia FK Unair menerangkan bahwa yang digunakan penelitian merupakan hewan uji dengan spesifikasi:

Mencit (*Mus musculus*)

Keterangan : Sehat

Jenis Kelamin : Jantan

Jumlah : 150 ekor

Asal Usul Hewan : Pusvetma

yang pengelolanya telah bersertifikat dan disesuaikan dengan standard baku penelitian.

Demikian surat keterangan ini dibuat untuk dapat digunakan sebaik-baiknya.

Surabaya, 18 Desember 2012

Koordinator



RATBOX
SUPPLIER HEWAN PRATIPIKUM
TEL: 081330636732
Surabaya

Heri Soemantoro

LAMPIRAN K

TABEL KORELASI (r)

Degrees of Freedom (DF)	5 Percent	1 Percent	Degrees of Freedom (DF)	5 Percent	1 Percent
1	0.997	1	24	0.388	0.496
2	0.95	0.99	25	0.381	0.487
3	0.878	0.959	26	0.374	0.478
4	0.811	0.917	27	0.367	0.47
5	0.754	0.874	28	0.361	0.463
6	0.707	0.834	29	0.355	0.456
7	0.666	0.798	30	0.349	0.449
8	0.632	0.765	31	0.325	0.418
9	0.602	0.735	32	0.304	0.393
10	0.576	0.708	33	0.288	0.372
11	0.553	0.684	34	0.273	0.354
12	0.532	0.661	35	0.25	0.325
13	0.514	0.641	36	0.232	0.302
14	0.497	0.623	37	0.217	0.283
15	0.482	0.606	38	0.205	0.267
16	0.468	0.59	39	0.195	0.254
17	0.456	0.575	40	0.174	0.228
18	0.444	0.561	41	0.159	0.208
19	0.433	0.549	42	0.138	0.181
20	0.423	0.537	43	0.113	0.148
21	0.413	0.526	44	0.098	0.128
22	0.404	0.515	45	0.088	0.115
23	0.396	0.505	46	0.062	0.081