

LAMPIRAN A

Perhitungan Berat Asam Salisilat, 3-klorobenzoil klorida dan Piridin

1. Asam Salisilat
= mol x BM
= 0,025 mol x 138,12
= 3,453 gram
2. 3-klorobenzoil klorida
= mol x BM
= 0,0275 mol x 177
= 5,31 gram
= gram : BJ
= 5,31 : 1,368
= 3,9 ml
3. Piridin
= mol x BM
= 0,03 mol x 79,10
= 2,373 gram
= gram : BJ
= 2,373 : 1,435
= 1,65 ml \approx 2,0 ml

LAMPIRAN B

Perhitungan Persentase Hasil Sintesis Senyawa Asam 2-(3-Klorobenzoiloksi)benzoat

Reaksi:

3-klorobenzoil klorida + asam salisilat → asam 2-(3-klorobenzoiloksi)benzoat

Mula : 0,030 mol 0,025 mol

Bereaksi : 0,025 mol 0,025 mol 0,025 mol

Sisa : 0,005 mol - 0,025 mol

Perhitungan berat senyawa asam 2-(3-klorobenzoiloksi)benzoat secara teoritis :

BM asam 2-(3-klorobenzoiloksi)benzoat = 276,67

Berat asam 2-(3-klorobenzoiloksi)benzoat = 0,025 mol x BM senyawa
= 0,025 mol x 276,67
= 6,92 gram

Berat senyawa hasil sintesis yang diperoleh = 3,716 gram

Perhitungan persentase hasil :

$$\begin{aligned}\% \text{ hasil} &= \frac{\text{berat senyawa hasil sintesis}}{\text{berat senyawa secara teoritis}} \times 100\% \\ &= \frac{3,716}{6,92} \times 100\% \\ &= 53,69 \%\end{aligned}$$

LAMPIRAN C

Tukey HSD^a

uji	N	Subset for alpha = 0.05						
		1	2	3	4	5	6	7
12,5a	5	3.0000						
25a	5	8.0000	8.0000					
50a	5		13.0000	13.0000				
100a	5			18.0000	18.0000			
200a	5				23.0000	23.0000		
0,5%	5				24.8000	24.8000		
12,5b	5					28.0000	28.0000	
25b	5						33.0000	
50b	5						33.4000	
100b	5							43.0000
200b	5							48.0000
Sig.		.582	.582	.582	.170	.582	.471	.582

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

Multiple Comparisons

hasil

Tukey HSD

(I) uji	(J) uji	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
12,5a	25a	-5.00000	2.37810	.582	-13.0689	3.0689
	50a	-10.00000*	2.37810	.005	-18.0689	-1.9311
	100a	-15.00000*	2.37810	.000	-23.0689	-6.9311
	200a	-20.00000*	2.37810	.000	-28.0689	-11.9311
12,5b	25b	-25.00000*	2.37810	.000	-33.0689	-16.9311
	50b	-30.00000*	2.37810	.000	-38.0689	-21.9311
	100b	-30.40000*	2.37810	.000	-38.4689	-22.3311
	200b	-40.00000*	2.37810	.000	-48.0689	-31.9311

	200b	-45.00000 [*]	2.37810	.000	-53.0689	-36.9311
	0,5%	-21.80000 [*]	2.37810	.000	-29.8689	-13.7311
25a	12,5a	5.00000	2.37810	.582	-3.0689	13.0689
	50a	-5.00000	2.37810	.582	-13.0689	3.0689
	100a	-10.00000 [*]	2.37810	.005	-18.0689	-1.9311
	200a	-15.00000 [*]	2.37810	.000	-23.0689	-6.9311
	12,5b	-20.00000 [*]	2.37810	.000	-28.0689	-11.9311
	25b	-25.00000 [*]	2.37810	.000	-33.0689	-16.9311
	50b	-25.40000 [*]	2.37810	.000	-33.4689	-17.3311
	100b	-35.00000 [*]	2.37810	.000	-43.0689	-26.9311
	200b	-40.00000 [*]	2.37810	.000	-48.0689	-31.9311
	0,5%	-16.80000 [*]	2.37810	.000	-24.8689	-8.7311
50a	12,5a	10.00000 [*]	2.37810	.005	1.9311	18.0689
	25a	5.00000	2.37810	.582	-3.0689	13.0689
	100a	-5.00000	2.37810	.582	-13.0689	3.0689
	200a	-10.00000 [*]	2.37810	.005	-18.0689	-1.9311
	12,5b	-15.00000 [*]	2.37810	.000	-23.0689	-6.9311
	25b	-20.00000 [*]	2.37810	.000	-28.0689	-11.9311
	50b	-20.40000 [*]	2.37810	.000	-28.4689	-12.3311
	100b	-30.00000 [*]	2.37810	.000	-38.0689	-21.9311
	200b	-35.00000 [*]	2.37810	.000	-43.0689	-26.9311
	0,5%	-11.80000 [*]	2.37810	.001	-19.8689	-3.7311
100a	12,5a	15.00000 [*]	2.37810	.000	6.9311	23.0689
	25a	10.00000 [*]	2.37810	.005	1.9311	18.0689
	50a	5.00000	2.37810	.582	-3.0689	13.0689
	200a	-5.00000	2.37810	.582	-13.0689	3.0689
	12,5b	-10.00000 [*]	2.37810	.005	-18.0689	-1.9311
	25b	-15.00000 [*]	2.37810	.000	-23.0689	-6.9311
	50b	-15.40000 [*]	2.37810	.000	-23.4689	-7.3311
	100b	-25.00000 [*]	2.37810	.000	-33.0689	-16.9311
	200b	-30.00000 [*]	2.37810	.000	-38.0689	-21.9311
	0,5%	-6.80000	2.37810	.170	-14.8689	1.2689
200a	12,5a	20.00000 [*]	2.37810	.000	11.9311	28.0689
	25a	15.00000 [*]	2.37810	.000	6.9311	23.0689
	50a	10.00000 [*]	2.37810	.005	1.9311	18.0689
	100a	5.00000	2.37810	.582	-3.0689	13.0689

	12.5b	-5.00000	2.37810	.582	-13.0689	3.0689
	25b	-10.00000*	2.37810	.005	-18.0689	-1.9311
	50b	-10.40000*	2.37810	.003	-18.4689	-2.3311
	100b	-20.00000*	2.37810	.000	-28.0689	-11.9311
	200b	-25.00000*	2.37810	.000	-33.0689	-16.9311
	0,5%	-1.80000	2.37810	.999	-9.8689	6.2689
12.5b	12,5a	25.00000*	2.37810	.000	16.9311	33.0689
	25a	20.00000*	2.37810	.000	11.9311	28.0689
	50a	15.00000*	2.37810	.000	6.9311	23.0689
	100a	10.00000*	2.37810	.005	1.9311	18.0689
	200a	5.00000	2.37810	.582	-3.0689	13.0689
	25b	-5.00000	2.37810	.582	-13.0689	3.0689
	50b	-5.40000	2.37810	.471	-13.4689	2.6689
	100b	-15.00000*	2.37810	.000	-23.0689	-6.9311
	200b	-20.00000*	2.37810	.000	-28.0689	-11.9311
	0,5%	3.20000	2.37810	.955	-4.8689	11.2689
25b	12,5a	30.00000*	2.37810	.000	21.9311	38.0689
	25a	25.00000*	2.37810	.000	16.9311	33.0689
	50a	20.00000*	2.37810	.000	11.9311	28.0689
	100a	15.00000*	2.37810	.000	6.9311	23.0689
	200a	10.00000*	2.37810	.005	1.9311	18.0689
	12.5b	5.00000	2.37810	.582	-3.0689	13.0689
	50b	-.40000	2.37810	1.000	-8.4689	7.6689
	100b	-10.00000*	2.37810	.005	-18.0689	-1.9311
	200b	-15.00000*	2.37810	.000	-23.0689	-6.9311
	0,5%	8.20000*	2.37810	.043	.1311	16.2689
50b	12,5a	30.40000*	2.37810	.000	22.3311	38.4689
	25a	25.40000*	2.37810	.000	17.3311	33.4689
	50a	20.40000*	2.37810	.000	12.3311	28.4689
	100a	15.40000*	2.37810	.000	7.3311	23.4689
	200a	10.40000*	2.37810	.003	2.3311	18.4689
	12.5b	5.40000	2.37810	.471	-2.6689	13.4689
	25b	.40000	2.37810	1.000	-7.6689	8.4689
	100b	-9.60000*	2.37810	.009	-17.6689	-1.5311
	200b	-14.60000*	2.37810	.000	-22.6689	-6.5311
	0,5%	8.60000*	2.37810	.028	.5311	16.6689

100b	12,5a	40.00000*	2.37810	.000	31.9311	48.0689
	25a	35.00000*	2.37810	.000	26.9311	43.0689
	50a	30.00000*	2.37810	.000	21.9311	38.0689
	100a	25.00000*	2.37810	.000	16.9311	33.0689
	200a	20.00000*	2.37810	.000	11.9311	28.0689
	12.5b	15.00000*	2.37810	.000	6.9311	23.0689
	25b	10.00000*	2.37810	.005	1.9311	18.0689
	50b	9.60000*	2.37810	.009	1.5311	17.6689
	200b	-5.00000	2.37810	.582	-13.0689	3.0689
	0,5%	18.20000*	2.37810	.000	10.1311	26.2689
200b	12,5a	45.00000*	2.37810	.000	36.9311	53.0689
	25a	40.00000*	2.37810	.000	31.9311	48.0689
	50a	35.00000*	2.37810	.000	26.9311	43.0689
	100a	30.00000*	2.37810	.000	21.9311	38.0689
	200a	25.00000*	2.37810	.000	16.9311	33.0689
	12.5b	20.00000*	2.37810	.000	11.9311	28.0689
	25b	15.00000*	2.37810	.000	6.9311	23.0689
	50b	14.60000*	2.37810	.000	6.5311	22.6689
	100b	5.00000	2.37810	.582	-3.0689	13.0689
	0,5%	23.20000*	2.37810	.000	15.1311	31.2689
	0,5%	12,5a	21.80000*	2.37810	.000	13.7311
25a		16.80000*	2.37810	.000	8.7311	24.8689
50a		11.80000*	2.37810	.001	3.7311	19.8689
100a		6.80000	2.37810	.170	-1.2689	14.8689
200a		1.80000	2.37810	.999	-6.2689	9.8689
12.5b		-3.20000	2.37810	.955	-11.2689	4.8689
25b		-8.20000*	2.37810	.043	-16.2689	-1.1311
50b		-8.60000*	2.37810	.028	-16.6689	-5.311
100b		-18.20000*	2.37810	.000	-26.2689	-10.1311
200b		-23.20000*	2.37810	.000	-31.2689	-15.1311

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

LAMPIRAN D

Perhitungan Prosentase Hambatan Nyeri Senyawa Uji Asam 2-(3-klorobenzoiloksi)benzoat dan Asam Asetilsalisilat

$$\% \text{ hambatan nyeri} = \frac{f_K - f_T}{f_K} \times 100\%$$

f_T = frekuensi geliat rata-rata pada kelompok uji atau kelompok pembanding

f_K = frekuensi geliat rata-rata pada kelompok kontrol

Contoh perhitungan:

- % hambatan nyeri senyawa asam 2-(3-klorobenzoiloksi)benzoat dosis 12,5 mg/kgBB

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{24,8 - 36,99}{24,8} \times 100\% \\ &= 49,15\% \end{aligned}$$

- % hambatan nyeri senyawa asam asetilsalisilat dosis 12,5 mg/kgBB

$$\begin{aligned} \% \text{ hambatan nyeri} &= \frac{24,8 - 34,24}{24,8} \times 100\% \\ &= 38,06\% \end{aligned}$$

LAMPIRAN E

Sertifikat Tikus

CV. SURABAYA MOUSE SERVICE
WEDORO MASJID NO. 20E, RT 01 RW 05 WARU SIDOARJO
Telp : 085731276778 - 087856677108

Yang bertanda tangan di bawah ini :

Nama : M. Syamsul Bahri S. kom

Selaku penanggung jawab pengembangan Hewan Percobaan

Menerangkan bahwa yang digunakan pada penelitian :

Judul : Uji Aktivitas Analgesik Senyawa Asam 2-(3-
klorobenzoiloksi)benzoat pada Tikus Putih Jantan dengan
Uji Hot Plate

Peneliti : Beatrice Ivana Go

Fakultas : Farmasi

NIM / NIP : 2443011038

Merupakan hewan uji dengan spesifikasi :

Tikus galur : Swiss Webster

Umur : 2-3 bulan

Jenis kelamin : Jantan

Jumlah : 55 ekor

Demikian surat ini dibuat untuk digunakan sebaik – baiknya.

Sidoarjo, 22 November 2014
Penanggung jawab



LAMPIRAN F

TABEL DISTRIBUSI F

Titik Persentase Distribusi F untuk Probabilita = 0,05

df untuk penyebut (N2)	df untuk pembilang (N1)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	161	199	216	225	230	234	237	239	241	242	243	244	245	245	246
2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38	19.40	19.40	19.41	19.42	19.42	19.43
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81	8.79	8.76	8.74	8.73	8.71	8.70
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00	5.96	5.94	5.91	5.89	5.87	5.86
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77	4.74	4.70	4.68	4.66	4.64	4.62
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10	4.06	4.03	4.00	3.98	3.96	3.94
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68	3.64	3.60	3.57	3.55	3.53	3.51
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39	3.35	3.31	3.28	3.26	3.24	3.22
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18	3.14	3.10	3.07	3.05	3.03	3.01
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02	2.98	2.94	2.91	2.89	2.86	2.85
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90	2.85	2.82	2.79	2.76	2.74	2.72
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80	2.75	2.72	2.69	2.66	2.64	2.62
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71	2.67	2.63	2.60	2.58	2.55	2.53
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65	2.60	2.57	2.53	2.51	2.48	2.46
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59	2.54	2.51	2.48	2.45	2.42	2.40
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54	2.49	2.46	2.42	2.40	2.37	2.35
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49	2.45	2.41	2.38	2.35	2.33	2.31
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46	2.41	2.37	2.34	2.31	2.29	2.27
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42	2.38	2.34	2.31	2.28	2.26	2.23
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39	2.35	2.31	2.28	2.25	2.22	2.20
21	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37	2.32	2.28	2.25	2.22	2.20	2.18
22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34	2.30	2.26	2.23	2.20	2.17	2.15
23	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32	2.27	2.24	2.20	2.18	2.15	2.13
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30	2.25	2.22	2.18	2.15	2.13	2.11
25	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28	2.24	2.20	2.16	2.14	2.11	2.09
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27	2.22	2.18	2.15	2.12	2.09	2.07
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25	2.20	2.17	2.13	2.10	2.08	2.06
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24	2.19	2.15	2.12	2.09	2.06	2.04
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.22	2.18	2.14	2.10	2.08	2.05	2.03
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21	2.16	2.13	2.09	2.06	2.04	2.01
31	4.16	3.30	2.91	2.68	2.52	2.41	2.32	2.25	2.20	2.15	2.11	2.08	2.05	2.03	2.00
32	4.15	3.29	2.90	2.67	2.51	2.40	2.31	2.24	2.19	2.14	2.10	2.07	2.04	2.01	1.99
33	4.14	3.28	2.89	2.66	2.50	2.39	2.30	2.23	2.18	2.13	2.09	2.06	2.03	2.00	1.98
34	4.13	3.28	2.88	2.65	2.49	2.38	2.29	2.23	2.17	2.12	2.08	2.05	2.02	1.99	1.97
35	4.12	3.27	2.87	2.64	2.49	2.37	2.29	2.22	2.16	2.11	2.07	2.04	2.01	1.99	1.96
36	4.11	3.26	2.87	2.63	2.48	2.36	2.28	2.21	2.15	2.11	2.07	2.03	2.00	1.98	1.95
37	4.11	3.25	2.86	2.63	2.47	2.36	2.27	2.20	2.14	2.10	2.06	2.02	2.00	1.97	1.95
38	4.10	3.24	2.85	2.62	2.46	2.35	2.26	2.19	2.14	2.09	2.05	2.02	1.99	1.96	1.94
39	4.09	3.24	2.85	2.61	2.46	2.34	2.26	2.19	2.13	2.08	2.04	2.01	1.98	1.95	1.93
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.12	2.08	2.04	2.00	1.97	1.95	1.92
41	4.08	3.23	2.83	2.60	2.44	2.33	2.24	2.17	2.12	2.07	2.03	2.00	1.97	1.94	1.92
42	4.07	3.22	2.83	2.59	2.44	2.32	2.24	2.17	2.11	2.06	2.03	1.99	1.96	1.94	1.91
43	4.07	3.21	2.82	2.59	2.43	2.32	2.23	2.16	2.11	2.06	2.02	1.99	1.96	1.93	1.91
44	4.06	3.21	2.82	2.58	2.43	2.31	2.23	2.16	2.10	2.05	2.01	1.98	1.95	1.92	1.90
45	4.06	3.20	2.81	2.58	2.42	2.31	2.22	2.15	2.10	2.05	2.01	1.97	1.94	1.92	1.89