

**LAMPIRAN A**  
**PERHITUNGAN BERAT**

1. Piroksikam = mol x BM  
= 0,015 mol x 331,5  
= 4,9725 gram

2. 4-klorobenzoil klorida = mol x BM  
= 0,018 x 175  
= 3,15 gram  
= gram : BJ  
= 3,15 : 1,26  
= 2,5 ml

3. Piridin = mol x BM  
= 0,003 x 79,10  
= 2,373 gram  
= gram : BJ  
= 2,373 : 1,435  
= 1,65 ml  $\approx$  2,0 ml

**LAMPIRAN B**  
**PERHITUNGAN PERSENTASE HASIL**

Piroksikam + 4-klorobenzoil klorida → senyawa hasil sintesis

M :	0,015 mol	0,018 mol	-
B :	0,015 mol	0,015 mol	0,015 mol
S :	-	-	0,015 mol

$$\text{BM senyawa hasil sintesis} = 455,87$$

$$\text{Berat teoritis senyawa hasil sintesis} = 0,015 \text{ mol} \times 455,87$$

$$= 6,8381 \text{ gram}$$

$$\text{Hasil yang didapat} = 2,456 \text{ gram}$$

$$\text{Jadi, persentase hasil} = \frac{\text{Berat senyawa hasil sintesis}}{\text{Berat senyawa secara teoritis}} \times 100\%$$

$$= \frac{2,456}{6,8381} \times 100\%$$

$$= 35,92 \%$$

**LAMPIRAN C**  
**PERHITUNGAN DOSIS**

- Dosis piroksikam : 20 mg / 70 kg BB
  
- Untuk mencit 20 g = dosis x FK (0,0026)  
= 20 x 0,0026  
= 0,052 mg/20 g mencit  
= 2,6 mg/kg BB
  
- Dosis yang dipakai : 0,625; 1,25; 2,5; 5; 10 mg/kg BB

$$\text{Volumeinjeksi} = \frac{\text{Dosis}}{\text{Konsentrasi suspensiobat}} \times \frac{\text{Berat badan mencit}}{1000}$$

Dibuat larutan baku induk :

Timbang 50 mg sediaan lalu campur dengan mucilago CMC-Na 0,5% ad 50 ml lalu dihomogenkan, sehingga didapat konsentrasi 1 mg/ml (1000 ppm).

1. Dosis 10 mg/kg BB

$$\begin{aligned} \text{Volume pemberian} &= \frac{10 \text{ mg}}{1 \text{ mg/ml}} \times \frac{20 \text{ g}}{1000} \\ &= 0,2 \text{ ml} \end{aligned}$$

2. Dosis 5 mg/kg BB (0,5 mg/ml = 500 ppm)

Pipet larutan baku induk 5 ml adkan dengan CMC-Na 0,5% ad 10 ml.

$$\begin{aligned} \text{Volume pemberian} &= \frac{5 \text{ mg}}{0,5 \text{ mg/ml}} \times \frac{20 \text{ g}}{1000} \\ &= 0,2 \text{ ml} \end{aligned}$$

3. Dosis 2,5 mg/kg BB (0,25 mg/ml = 250 ppm)

Pipet larutan baku induk 2,5 ml adkan dengan CMC-Na 0,5% ad 10 ml.

$$\begin{aligned}\text{Volume pemberian} &= \frac{2,5 \text{ mg}}{0,25 \text{ mg/ml}} \times \frac{20 \text{ g}}{1000} \\ &= 0,2 \text{ ml}\end{aligned}$$

4. Dosis 1,25 mg/kg BB (0,125 mg/ml = 125 ppm)

Pipet larutan baku induk 2,5 ml adkan dengan CMC-Na 0,5% ad 20 ml.

$$\begin{aligned}\text{Volume pemberian} &= \frac{1,25 \text{ mg}}{0,125 \text{ mg/ml}} \times \frac{20 \text{ g}}{1000} \\ &= 0,2 \text{ ml}\end{aligned}$$

5. Dosis 0,625 mg/kg BB (0,0625 mg/ml = 62,5 ppm)

Pipet larutan baku induk 1,5 ml adkan dengan CMC-Na 0,5% ad 24 ml.

$$\begin{aligned}\text{Volume pemberian} &= \frac{0,625 \text{ mg}}{0,0625 \text{ mg/ml}} \times \frac{20 \text{ g}}{1000} \\ &= 0,2 \text{ ml}\end{aligned}$$

**LAMPIRAN D**  
**TABEL FREKUENSI GELIAT SELAMA 30 MENIT**

Hasil pengamatan frekuensi geliat mencit pada kelompok pembanding

Dosis (mg/kgBB)	No. mencit	Geliat mencit pada menit ke						Total geliat	% hambatan nyeri	Rata-rata % hambatan nyeri
		5'	10'	15'	20'	25'	30'			
0.625	1	9	43	37	40	23	8	160	7.73	(10.49 ± 2.28)
	2	17	38	34	26	20	17	152	12.34	
	3	36	27	37	21	19	19	159	8.30	
	4	42	37	21	21	17	15	153	11.76	
	5	31	37	28	40	7	9	152	12.34	
1.25	1	28	21	35	20	27	4	135	22.15	(19.84 ± 3.13)
	2	31	27	24	32	20	13	147	15.22	
	3	27	29	18	21	23	19	137	20.99	
	4	32	28	25	28	16	5	134	22.72	
	5	25	34	29	37	10	7	142	18.11	

	1	14	27	27	23	15	9	115	33.68	
	2	19	33	29	19	6	11	117	32.53	
2.5	3	32	21	31	24	6	0	114	34.26	(31.72 ± 2.63)
	4	31	25	28	17	13	7	121	30.22	
	5	30	27	29	21	18	0	125	27.19	

	1	14	19	26	24	13	3	99	42.91	
	2	21	19	14	23	8	12	97	44.06	
5	3	15	18	25	26	6	8	98	43.48	(43.71 ± 1.71)
	4	25	20	17	16	12	11	101	41.75	
	5	8	15	25	19	17	9	93	46.37	

	1	17	13	7	11	11	6	65	62.51	
	2	17	26	27	3	4	0	77	55.59	
10	3	15	21	19	8	8	5	76	56.17	(59.05 ± 3.19)
	4	13	19	8	17	12	2	71	59.05	
	5	15	20	17	12	2	0	66	61.94	



Hasil pengamatan frekuensi geliat mencit pada kelompok senyawa hasil sintesis

Dosis (mg/kgBB)	No. mencit	Geliat mencit pada menit ke						Total geliat	% hambatan nyeri	Rata-rata % hambatan nyeri
		5'	10'	15'	20'	25'	30'			
0.625	1	31	36	31	29	23	8	158	8.88	(11.88 ± 1.93)
	2	37	38	29	28	15	3	150	13.50	
	3	31	37	30	26	19	11	154	11.19	
	4	36	35	34	20	17	10	152	12.34	
	5	38	39	27	34	7	5	150	13.50	
1.25	1	26	30	29	18	15	12	130	25.03	(20.30 ± 4.19)
	2	13	27	28	29	31	18	146	15.80	
	3	27	32	27	24	19	14	143	17.53	
	4	28	23	28	25	19	8	131	24.45	
	5	28	25	23	19	26	20	141	18.69	
2.5	1	24	26	28	23	13	1	115	33.68	(32.64 ± 2.01)
	2	29	21	23	22	12	10	117	32.53	
	3	15	28	28	18	14	9	112	35.41	
	4	22	29	20	19	19	12	121	30.22	
	5	33	28	22	17	15	4	119	31.37	

	1	18	21	19	15	14	7	94	45.79	
	2	19	22	18	13	15	8	95	45.21	
5	3	24	24	21	16	10	0	95	45.21	(45.09 ± 1.31)
	4	14	26	24	12	13	10	99	42.91	
	5	21	18	22	14	12	6	93	46.37	
	1	10	18	17	14	5	0	64	63.09	
	2	12	18	17	13	10	5	75	56.75	
10	3	13	19	15	12	10	3	72	58.48	(60.44 ± 3.15)
	4	2	20	18	15	14	1	70	59.63	
	5	15	17	11	7	7	5	62	64.24	

Hasil pengamatan frekuensi geliat mencit pada kelompok kontrol

No. mencit	Geliat mencit pada menit ke						Total geliat	Rata-rata (± SD)
	5'	10'	15'	20'	25'	30'		
1	20	14	32	35	39	22	162	
2	32	25	17	26	24	48	172	
3	36	41	32	35	28	13	185	(173.4 ± 9.56)
4	44	31	30	19	25	18	167	
5	17	31	47	20	39	27	181	



**LAMPIRAN E**  
**PERHITUNGAN % HAMBATAN NYERI SENYAWA HASIL**  
**SINTESIS DAN SENYAWA PEMBANDING**

$$\text{Rumus : \% hambatan nyeri} = \frac{f_k - f_r}{f_k} \times 100 \%$$

$f_r$  = frekuensi geliat rata-rata pada kelompok uji atau kelompok pembanding

$f_k$  = frekuensi geliat rata-rata pada kelompok kontrol

**Pembanding**

1. Dosis 0,625 mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 160}{173.4} \times 100\% = 7.73 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 152}{173.4} \times 100\% = 12.34 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 159}{173.4} \times 100\% = 8.30 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 153}{173.4} \times 100\% = 11.76 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 152}{173.4} \times 100\% = 12.34 \%$$

$$\text{Rata-rata} \pm \text{SD} = 10.49 \pm 2.28$$

2. Dosis 1,25 mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 135}{173.4} \times 100\% = 22.15 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 147}{173.4} \times 100\% = 15.22 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-137}{173.4} \times 100\% = 20.99 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-134}{173.4} \times 100\% = 22.72 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-142}{173.4} \times 100\% = 18.11 \%$$

Rata-rata  $\pm$  SD = 19.84  $\pm$  3.13

### 3. Dosis 2,5 mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4-115}{173.4} \times 100\% = 33.68 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-117}{173.4} \times 100\% = 32.53 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-114}{173.4} \times 100\% = 34.26\%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-121}{173.4} \times 100\% = 30.22 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-125}{173.4} \times 100\% = 27.91 \%$$

Rata-rata  $\pm$  SD = 31.72  $\pm$  2.63

### 4. Dosis 5mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4-99}{173.4} \times 100\% = 42.91 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-97}{173.4} \times 100\% = 44.06 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 98}{173.4} \times 100\% = 43.48 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 101}{173.4} \times 100\% = 41.75 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 93}{173.4} \times 100\% = 46.37 \%$$

$$\text{Rata-rata} \pm \text{SD} = 43.71 \pm 1.71$$

5. Dosis 10 mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 65}{173.4} \times 100\% = 62.51 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 77}{173.4} \times 100\% = 55.59 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 76}{173.4} \times 100\% = 56.710\%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 71}{173.4} \times 100\% = 59.05\%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 66}{173.4} \times 100\% = 61.94 \%$$

$$\text{Rata-rata} \pm \text{SD} = 59.05 \pm 3.19$$

**Senyawa hasil sintesis**

1. Dosis 0,625 mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 158}{173.4} \times 100\% = 8.88 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 150}{173.4} \times 100\% = 13.50 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-154}{173.4} \times 100\% = 11.19 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-152}{173.4} \times 100\% = 12.34 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-150}{173.4} \times 100\% = 13.50 \%$$

$$\text{Rata-rata} \pm \text{SD} = 11.88 \pm 1.93$$

2. Dosis 1,25 mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4-130}{173.4} \times 100\% = 25.03 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-146}{173.4} \times 100\% = 15.80 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-143}{173.4} \times 100\% = 17.53 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-131}{173.4} \times 100\% = 24.45 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-141}{173.4} \times 100\% = 18.69 \%$$

$$\text{Rata-rata} \pm \text{SD} = 20.30 \pm 4.19$$

3. Dosis 2,5 mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4-115}{173.4} \times 100\% = 33.68 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4-117}{173.4} \times 100\% = 32.53 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 112}{173.4} \times 100\% = 35.41 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 121}{173.4} \times 100\% = 30.22 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 119}{173.4} \times 100\% = 31.37 \%$$

$$\text{Rata-rata} \pm \text{SD} = 32.64 \pm 2.01$$

#### 4. Dosis 5 mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 94}{173.4} \times 100\% = 45.79 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 95}{173.4} \times 100\% = 45.21 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 95}{173.4} \times 100\% = 45.21 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 99}{173.4} \times 100\% = 46.37 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 93}{173.4} \times 100\% = 45.09 \%$$

$$\text{Rata-rata} \pm \text{SD} = 45.09 \pm 1.31$$

#### 5. Dosis 10 mg/kg BB

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 64}{173.4} \times 100\% = 63.09 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 75}{173.4} \times 100\% = 56.75 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 72}{173.4} \times 100\% = 58.48 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 70}{173.4} \times 100\% = 59.63 \%$$

$$\% \text{ Hambatan nyeri} = \frac{173.4 - 62}{173.4} \times 100\% = 64.24 \%$$

$$\text{Rata-rata} \pm \text{SD} = 60.44 \pm 3.15$$





**LAMPPIRAN F**  
**HASIL UJI HSD ANTARA KELOMPOK SENYAWA HASIL**  
**SINTESIS, SENYAWA PEMBANDING, DAN KONTROL**

**Post Hoc Tests**

**Multiple Comparisons**

tot\_frekuensi\_gel  
 Tukey HSD

(I) seny_uji	(J) seny_uji	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
su0,625	su1,25	14.60000*	3.34501	.003	3.2504	25.9496
	su2,5	36.00000*	3.34501	.000	24.6504	47.3496
	su5	57.60000*	3.34501	.000	46.2504	68.9496
	su10	84.20000*	3.34501	.000	72.8504	95.5496
	p0,615	-2.40000	3.34501	1.000	-13.7496	8.9496
	p1,25	13.80000*	3.34501	.007	2.4504	25.1496
	p2,5	34.40000*	3.34501	.000	23.0504	45.7496
	p5	55.20000*	3.34501	.000	43.8504	66.5496
	p10	81.80000*	3.34501	.000	70.4504	93.1496
	k	-20.60000*	3.34501	.000	-31.9496	-9.2504
su1,25	su0,625	-14.60000*	3.34501	.003	-25.9496	-3.2504
	su2,5	21.40000*	3.34501	.000	10.0504	32.7496
	su5	43.00000*	3.34501	.000	31.6504	54.3496
	su10	69.60000*	3.34501	.000	58.2504	80.9496
	p0,615	-17.00000*	3.34501	.000	-28.3496	-5.6504
	p1,25	-.80000	3.34501	1.000	-12.1496	10.5496
	p2,5	19.80000*	3.34501	.000	8.4504	31.1496
	p5	40.60000*	3.34501	.000	29.2504	51.9496
	p10	67.20000*	3.34501	.000	55.8504	78.5496
	k	-35.20000*	3.34501	.000	-46.5496	-23.8504

su2,5	su0,625	-36.0000*	3.34501	.000	-47.3496	-24.6504
	su1,25	-21.40000*	3.34501	.000	-32.7496	-10.0504
	su5	21.60000*	3.34501	.000	10.2504	32.9496
	su10	48.20000*	3.34501	.000	36.8504	59.5496
	p0,615	-38.40000*	3.34501	.000	-49.7496	-27.0504
	p1,25	-22.20000*	3.34501	.000	-33.5496	-10.8504
	p2,5	-1.60000	3.34501	1.000	-12.9496	9.7496
	p5	19.20000*	3.34501	.000	7.8504	30.5496
	p10	45.80000*	3.34501	.000	34.4504	57.1496
	k	-56.60000*	3.34501	.000	-67.9496	-45.2504
su5	su0,625	-57.60000*	3.34501	.000	-68.9496	-46.2504
	su1,25	-43.00000*	3.34501	.000	-54.3496	-31.6504
	su2,5	-21.60000*	3.34501	.000	-32.9496	-10.2504
	su10	26.60000*	3.34501	.000	15.2504	37.9496
	p0,615	-60.00000*	3.34501	.000	-71.3496	-48.6504
	p1,25	-43.80000*	3.34501	.000	-55.1496	-32.4504
	p2,5	-23.20000*	3.34501	.000	-34.5496	-11.8504
	p5	-2.40000	3.34501	1.000	-13.7496	8.9496
	p10	24.20000*	3.34501	.000	12.8504	35.5496
	k	-78.20000*	3.34501	.000	-89.5496	-66.8504
su10	su0,625	-84.20000*	3.34501	.000	-95.5496	-72.8504
	su1,25	-69.60000*	3.34501	.000	-80.9496	-58.2504
	su2,5	-48.20000*	3.34501	.000	-59.5496	-36.8504
	su5	-26.60000*	3.34501	.000	-37.9496	-15.2504
	p0,615	-86.60000*	3.34501	.000	-97.9496	-75.2504
	p1,25	-70.40000*	3.34501	.000	-81.7496	-59.0504
	p2,5	-49.80000*	3.34501	.000	-61.1496	-38.4504
	p5	-29.00000*	3.34501	.000	-40.3496	-17.6504
	p10	-2.40000	3.34501	1.000	-13.7496	8.9496
	k	-104.80000*	3.34501	.000	-116.1496	-93.4504

p0,625	su0,625	2.40000	3.34501	1.000	-8.9496	13.7496
	su1,25	17.00000*	3.34501	.000	5.6504	28.3496
	su2,5	38.40000*	3.34501	.000	27.0504	49.7496
	su5	60.00000*	3.34501	.000	48.6504	71.3496
	su10	86.60000*	3.34501	.000	75.2504	97.9496
	p1,25	16.20000*	3.34501	.001	4.8504	27.5496
	p2,5	36.80000*	3.34501	.000	25.4504	48.1496
	p5	57.60000*	3.34501	.000	46.2504	68.9496
	p10	84.20000*	3.34501	.000	72.8504	95.5496
	k	-18.20000*	3.34501	.000	-29.5496	-6.8504
p1,25	su0,625	-13.80000*	3.34501	.007	-25.1496	-2.4504
	su1,25	.80000	3.34501	1.000	-10.5496	12.1496
	su2,5	22.20000*	3.34501	.000	10.8504	33.5496
	su5	43.80000*	3.34501	.000	32.4504	55.1496
	su10	70.40000*	3.34501	.000	59.0504	81.7496
	p0,615	-16.20000*	3.34501	.001	-27.5496	-4.8504
	p2,5	20.60000*	3.34501	.000	9.2504	31.9496
	p5	41.40000*	3.34501	.000	30.0504	52.7496
	p10	68.00000*	3.34501	.000	56.6504	79.3496
	k	-34.40000*	3.34501	.000	-45.7496	-23.0504
p2,5	su0,625	-34.40000*	3.34501	.000	-45.7496	-23.0504
	su1,25	-19.80000*	3.34501	.000	-31.1496	-8.4504
	su2,5	1.60000	3.34501	1.000	-9.7496	12.9496
	su5	23.20000*	3.34501	.000	11.8504	34.5496
	su10	49.80000*	3.34501	.000	38.4504	61.1496
	p0,615	-36.80000*	3.34501	.000	-48.1496	-25.4504
	p1,25	-20.60000*	3.34501	.000	-31.9496	-9.2504
	p5	20.80000*	3.34501	.000	9.4504	32.1496
	p10	47.40000*	3.34501	.000	36.0504	58.7496
	k	-55.00000*	3.34501	.000	-66.3496	-43.6504

p5	su0,625	-55.20000*	3.34501	.000	-66.5496	-43.8504
	su1,25	-40.60000*	3.34501	.000	-51.9496	-29.2504
	su2,5	-19.20000*	3.34501	.000	-30.5496	-7.8504
	su5	2.40000	3.34501	1.000	-8.9496	13.7496
	su10	29.00000*	3.34501	.000	17.6504	40.3496
	p0,615	-57.60000*	3.34501	.000	-68.9496	-46.2504
	p1,25	-41.40000*	3.34501	.000	-52.7496	-30.0504
	p2,5	-20.80000*	3.34501	.000	-32.1496	-9.4504
	p10	26.60000*	3.34501	.000	15.2504	37.9496
	k	-75.80000*	3.34501	.000	-87.1496	-64.4504
p10	su0,625	-81.80000*	3.34501	.000	-93.1496	-70.4504
	su1,25	-67.20000*	3.34501	.000	-78.5496	-55.8504
	su2,5	-45.80000*	3.34501	.000	-57.1496	-34.4504
	su5	-24.20000*	3.34501	.000	-35.5496	-12.8504
	su10	2.40000	3.34501	1.000	-8.9496	13.7496
	p0,615	-84.20000*	3.34501	.000	-95.5496	-72.8504
	p1,25	-68.00000*	3.34501	.000	-79.3496	-56.6504
	p2,5	-47.40000*	3.34501	.000	-58.7496	-36.0504
	p5	-26.60000*	3.34501	.000	-37.9496	-15.2504
	k	-102.40000*	3.34501	.000	-113.7496	-91.0504
k	su0,625	20.60000*	3.34501	.000	9.2504	31.9496
	su1,25	35.20000*	3.34501	.000	23.8504	46.5496
	su2,5	56.60000*	3.34501	.000	45.2504	67.9496
	su5	78.20000*	3.34501	.000	66.8504	89.5496
	su10	104.80000*	3.34501	.000	93.4504	116.1496
	p0,615	18.20000*	3.34501	.000	6.8504	29.5496
	p1,25	34.40000*	3.34501	.000	23.0504	45.7496
	p2,5	55.00000*	3.34501	.000	43.6504	66.3496
	p5	75.80000*	3.34501	.000	64.4504	87.1496
	p10	102.40000*	3.34501	.000	91.0504	113.7496

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

LAMPIRAN G

HASIL UJI ED<sub>50</sub> SENYAWA HASIL SINTESIS

\* \* \* \* \* P R O B I T A N A L Y S I S \* \* \* \* \*

Cell Counts and Residuals

Number	seny_uji	Number of Subjects	Observed Responses	Expected Responses	Residual	Probability
PROBIT 1	.625	100	12	18.925	-7.045	.189
2	1.250	100	20	21.279	-.979	.213
3	2.500	100	33	26.468	6.172	.265
4	5.000	100	45	38.460	6.630	.385
5	10.000	100	60	64.717	-4.277	.647

Confidence Limits

Probability	95% Confidence Limits for seny_uji		
	Estimate	Lower Bound	Upper Bound
PROBIT <sup>a</sup> 0.01	-10.146	-39.936	-4.099
0.02	-8.115	-33.771	-2.841
0.03	-6.826	-29.868	-2.034
0.04	-5.857	-26.937	-1.421
0.05	-5.068	-24.559	-.918
0.06	-4.397	-22.538	-.485
0.07	-3.809	-20.771	-.101
0.08	-3.282	-19.193	.246
0.09	-2.803	-17.761	.566

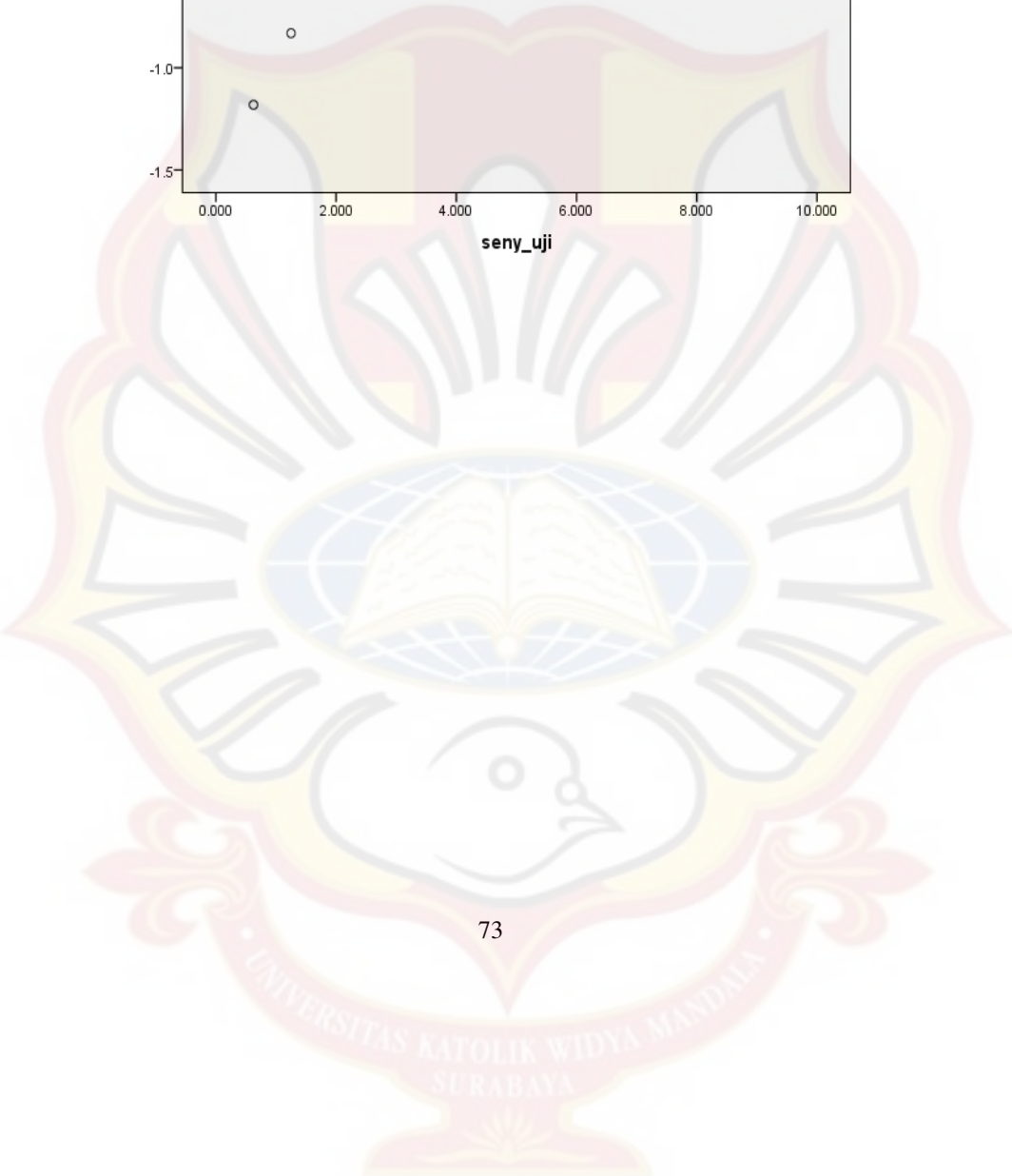
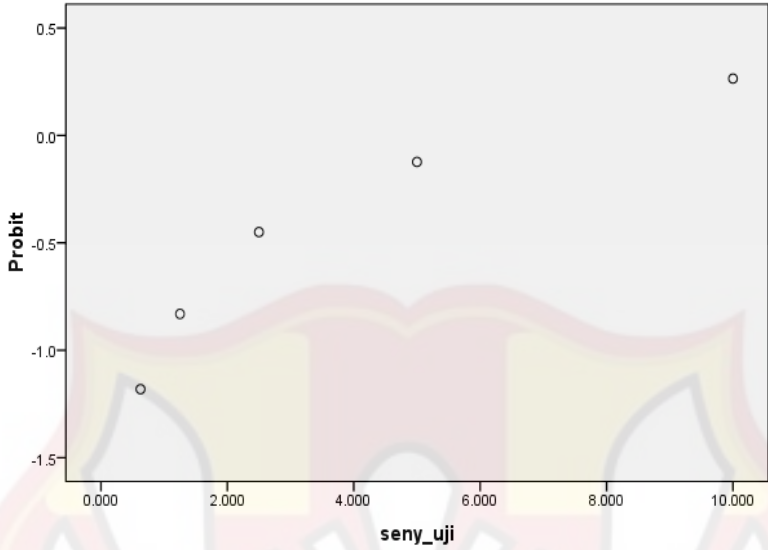


0.1	-2.362	-16.447	.865
0.15	-.536	-11.066	2.159
0.2	.916	-6.912	3.311
0.25	2.161	-3.538	4.488
0.3	3.279	-.814	5.851
0.35	4.315	1.274	7.551
0.4	5.299	2.795	9.624
0.45	6.250	3.923	11.973
<b>0.5</b>	<b>7.186</b>	<b>4.828</b>	<b>14.490</b>
0.55	8.122	5.615	17.126
0.6	9.074	6.342	19.876
0.65	10.057	7.048	22.764
0.7	11.093	7.758	25.841
0.75	12.211	8.501	29.186
0.8	13.456	9.308	32.930
0.85	14.908	10.232	37.312
0.9	16.734	11.376	42.844
0.91	17.175	11.650	44.182
0.92	17.654	11.947	45.636
0.93	18.181	12.273	47.236
0.94	18.769	12.636	49.024
0.95	19.440	13.049	51.064
0.96	20.229	13.533	53.463
0.97	21.198	14.126	56.412
0.98	22.487	14.913	60.336
0.99	24.518	16.148	66.524

a. A heterogeneity factor is used.



Probit Transformed Responses



**LAMPIRAN H**

**HASIL UJI ED<sub>50</sub> SENYAWA PEMBANDING**

\* \* \* \* \* P R O B I T   A N A L Y S I S \* \* \* \* \*

**Cell Counts and Residuals**

	Number	seny_obat	Number of Subjects	Observed Responses	Expected Responses	Residual	Probability
PROBIT	1	.625	100	10	18.046	-7.556	.180
	2	1.250	100	20	20.330	-.490	.203
	3	2.500	100	32	25.384	6.336	.254
	4	5.000	100	44	37.162	6.548	.372
	5	10.000	100	59	63.389	-4.339	.634

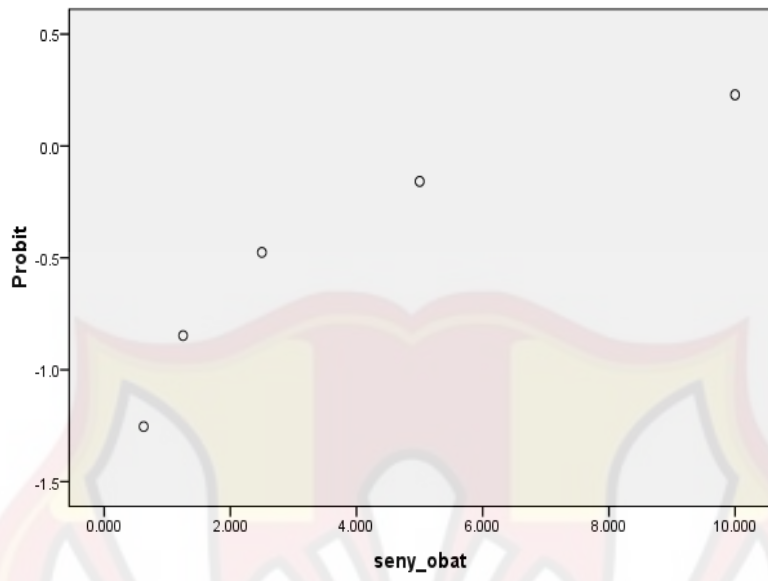
**Confidence Limits**

		95% Confidence Limits for seny_obat		
	Probability	Estimate	Lower Bound	Upper Bound
PROBIT <sup>a</sup>	0.01	-9.922	-44.236	-3.765
	0.02	-7.887	-37.361	-2.524
	0.03	-6.596	-33.008	-1.727
	0.04	-5.624	-29.741	-1.121
	0.05	-4.834	-27.088	-.622
	0.06	-4.162	-24.835	-.193
	0.07	-3.572	-22.865	.189
	0.08	-3.044	-21.105	.534
	0.09	-2.564	-19.509	.853
	0.1	-2.122	-18.044	1.152
	0.15	-.292	-12.049	2.456
	0.2	1.162	-7.434	3.641

0.25	2.410	-3.713	4.896
0.3	3.531	-.764	6.416
0.35	4.569	1.417	8.376
0.4	5.554	2.947	10.775
0.45	6.507	4.062	13.462
<b>0.5</b>	<b>7.446</b>	<b>4.952</b>	<b>16.314</b>
0.55	8.384	5.726	19.282
0.6	9.337	6.442	22.368
0.65	10.322	7.137	25.603
0.7	11.361	7.837	29.044
0.75	12.481	8.569	32.781
0.8	13.729	9.364	36.962
0.85	15.183	10.273	41.854
0.9	17.013	11.399	48.026
0.91	17.455	11.669	49.519
0.92	17.935	11.961	51.142
0.93	18.463	12.282	52.927
0.94	19.053	12.639	54.921
0.95	19.725	13.045	57.197
0.96	20.515	13.521	59.872
0.97	21.487	14.105	63.162
0.98	22.778	14.879	67.539
0.99	24.813	16.094	74.440

a. A heterogeneity factor is used.

### Probit Transformed Responses



**LAMPIRAN I**  
**SERTIFIKAT PIROKSIKAM**




南通精华制药股份有限公司检验报告  
NANTONG JINGHUA PHARMACEUTICAL CO. LTD.  
CERTIFICATE OF ANALYSIS  
APIs.ADD:43 Yaogang Road,Nantong Jiangsu China  
Tel:86-513-85609405/85609406


**吡罗昔康**  
PIROXICAM MICRONIZED

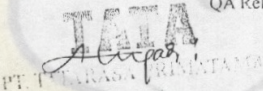
Batch No.	PRX2009005M	Manufacture Date	2009.3.4
Total Quantity	200.0KG	Report Date	2009.3.5
Commercial Quantity	200.0KG	Re-test Date	2012.3.3
Inspection No.	09030020		

TEST	SPECIFICATIONS (USP)	RESULTS
Characteristics	off-white to light tan or light yellow odorless powder	Complies
Identification	A. IR B. UV C. TLC	Complies
Water	≤0.5%	0.32%
Residue on ignition	≤0.3%	0.14%
Heavy metals	≤0.005%	<0.005%
Organic volatile impurities	complies	Complies
Residual solvents	Ethanol ≤0.5%	<0.5%
Particle size	100% ≤ 1000 mesh	Complies
Assay	97.0-103.0%	99.46%

Conclusion The product meets the requirements of USP 31 and the additional items defined by customer

Analyst  Supervisor  Chief of Laboratory 

QA Release Date 

  
PT. TARA RINANTANGA



**LAMPIRAN J**  
**SERTIFIKAT HEWAN COBA MENCIT (*MUS MUSCULUS*)**

**CV. SURABAYA MOUSE SERVICE**  
**WEDORO MASJID NO. 20-E RT. 01 RW.05 WEDORO**  
**KECAMATAN WARU SIDOARJO**  
**TELP. 081938310682 – 03170259110**

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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 : Sintesis O-(4-Kloro Benzoil) Piroksikam dan Uji Aktivitas Analgesik terhadap Mencit (*Mus Musculus*).

Peneliti : Erni

Institusi : Fakultas Farmasi Universitas Katolik Widya Mandala Surabaya

NRP : 2443004115

Merupakan hewan uji dengan spesifikasi:

Mencit galur : Swiss Webster

Umur : 2 – 3 bulan

Jenis kelamin : Jantan

Jumlah : 60 ekor

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

Sidoarjo, 20 April 2010

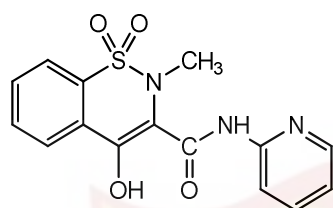
Penanggung Jawab



(M. Syamsul Bahri, S.Kom)



**LAMPIRAN K**  
**STRUKTUR MOLEKUL PIROKSIKAM, O-(4-**  
**KLOBENZOIL)PIROKSIKAM DAN SENYAWA HASIL**  
**SINTESIS**



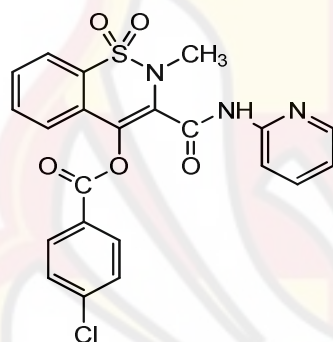
Piroksikam

Chemical Formula :  $C_{15}H_{13}N_3O_4S$

Molecular Weight : 331,35

Log P : 0,29

MR : 84,76



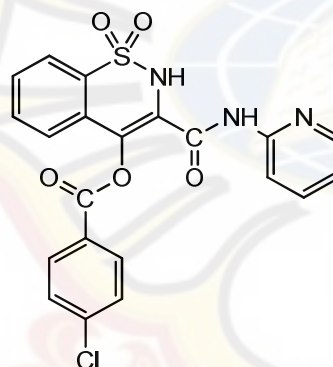
O-(4-klorobenzoyl)piroksikam

Chemical Formula :  $C_{22}H_{16}ClN_3O_5S$

Molecular Weight: : 469,90

Log P : 2,98

MR : 118,85



Senyawa hasil sintesis (4-(4-  
 klorobenzoyloksi)-N-piridinil-2H-  
 1,2benzotiazin-3-karboxamida-  
 1,1dioxida)

Chemical Formula :  $C_{21}H_{14}ClN_3O_5S$

Molecular Weight: : 455,87

Log P : 2,68

MR : 114,97