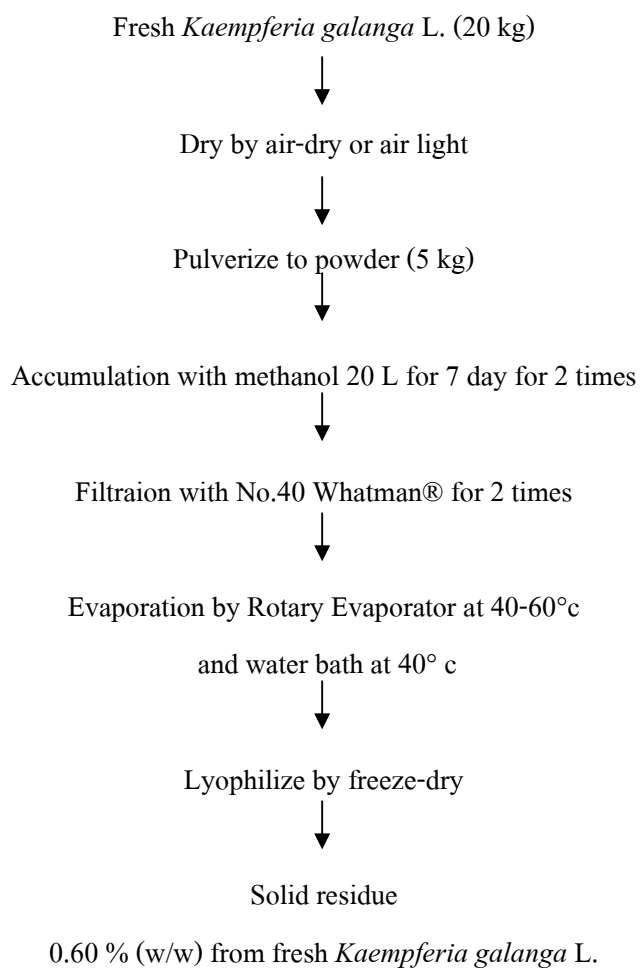


**APPENDIX-A****Extraction procedure**

## APPENDIX-B

### Agent preparation

1. 0.9% normal saline (0.9% NSS)

Dissolve 0.9 g of sodium chloride with 100 ml of distilled water

2. 2.5% (v/v) formalin

Dilute 0.625 ml of 40% formalin with 0.9% NSS to produce 10 ml

3. 0.6% (v/v) acetic acid

Dilute 0.06 ml of acetic acid with 0.9% NSS to produce 10 ml

4. 1% (w/v) carrageenan

Dissolve 0.1 g of carrageenan with 10 ml of 0.9% NSS

5. 20% (w/v) Brewer's yeast

Dissolve 2 g of Brewer's yeast with 10 ml of 0.9% NSS

6. Morphine sulfate and naloxone

Dissolve morphine or naloxone with 0.9% NSS

7. Aspirin, Methanol extract of *Kaempferia galanga* (MEKG) at 50, 100, 200 mg/kg

Dissolve aspirin or MEKG with cosolvent (Propylene glycol: Tween 80: Distill water; 4 :1 : 5)

### Dosing for oral administration

Methanol extract of *Kaempferia galanga* and aspirin administered orally in a constant volume, 10 ml/kg for mice and 5 ml/kg for rats.

**APPENDIX-C**

Effects of the methanol extract of *Kaempferia galanga* (MEKG) and aspirin on acetic acid-induced writhing in mice.

Group	Number	Weight (g)	Number of writhing	Group	Number	Weight (g)	Number of writhing
Control (cosolvent), p.o.	1	32	58	Aspirin 100 mg/kg, p.o.	1	35	23
	2	36	64		2	36	19
	3	38	44		3	37	28
	4	38	40		4	39	32
	5	37	61		5	38	24
	6	36	42		6	36	27
	7	35	53		7	33	20
	8	33	54		8	35	25
	9	36	49		9	31	27
	10	34	52		10	36	28
	Mean±S.E.M	35.50±0.64	51.70±2.54		Mean±S.E.M	25.60±0.73	25.30±1.25

Group	Number	Weight (g)	Number of writhing	Group	Number	Weight (g)	Number of writhing
MEKG 50 mg/kg, p.o.	1	36	29	MEKG 100 mg/kg, p.o.	1	38	25
	2	35	25		2	38	15
	3	37	35		3	36	17
	4	37	33		4	39	20
	5	36	26		5	33	18
	6	35	30		6	37	24
	7	34	31		7	35	23
	8	37	38		8	36	31
	9	36	30		9	37	19
	10	35	29		10	38	17
Mean±S.E.M	35.80±0.33	29.60±0.95	Mean±S.E.M	36.70±0.56	20.90±1.53		

<b>Group</b>	<b>Number</b>	<b>Weight (g)</b>	<b>Number of writhing</b>
MEKG 200 mg/kg, p.o.	1	36	16
	2	35	10
	3	33	21
	4	38	18
	5	36	13
	6	37	11
	7	35	17
	8	38	19
	9	37	14
	10	34	13
Mean±S.E.M		35.90±0.53	15.20±1.13

Effects of the methanol extract of *Kaempferia galanga* (MEKG), morphine and aspirin on 2.5% formalin-induced paw licking in mice.

Group	Number	Weight (g)	Licking of hind paw (s)	
			Early phase (0-5 min)	Late phase (15-30 min)
Control (cosolvent), p.o.	1	38	76.56	78.99
	2	38	74.75	102.48
	3	38	99.68	86.52
	4	31	68.59	95.35
	5	38	62.50	108.83
	6	36	65.53	98.69
	7	33	71.08	83.31
	8	39	79.75	107.74
	9	37	83.47	97.16
	10	35	89.76	84.24
	Mean±S.E.M	36.30±0.82	77.17±3.62	94.03±3.22

Group	Number	Weight (g)	Licking of hind paw (s)	
			Early phase (0-5 min)	Late phase (15-30 min)
Morphine 5 mg/kg, s.c.	1	38	28.15	12.36
	2	38	19.42	23.49
	3	37	22.59	18.47
	4	38	27.83	19.62
	5	35	32.46	18.18
	6	36	24.44	16.25
	7	33	26.18	17.68
	8	37	19.31	20.46
	9	35	29.93	14.52
	10	36	25.75	15.23
	Mean±S.E.M	36.30±0.52	25.61±1.36	17.63±1.01



Group	Number	Weight (g)	Licking of hind paw (s)	
			Early phase (0-5 min)	Late phase (15-30 min)
Aspirin 100 mg/kg, p.o.	1	36	42.18	71.42
	2	38	43.49	76.95
	3	39	34.25	91.88
	4	38	48.83	75.95
	5	36	31.66	67.38
	6	40	53.08	65.95
	7	36	44.25	80.09
	8	34	33.83	71.16
	9	37	47.39	88.89
	10	33	38.23	79.75
	Mean±S.E.M	36.70±0.68	41.72±2.24	76.94±2.71

Group	Number	Weight (g)	Licking of hind paw (s)	
			Early phase (0-5 min)	Late phase (15-30 min)
MEKG 50 mg/kg, p.o.	1	37	58.29	24.36
	2	36	65.14	35.84
	3	38	46.22	32.27
	4	35	52.52	38.97
	5	37	41.12	21.22
	6	35	59.73	33.61
	7	36	57.17	24.76
	8	37	49.04	26.39
	9	32	53.42	25.49
	10	33	67.08	31.97
	Mean±S.E.M	35.60±0.60	54.97±2.58	29.21±1.93

Group	Number	Weight (g)	Licking of hind paw (s)	
			Early phase (0-5 min)	Late phase (15-30 min)
MEKG 100 mg/kg, p.o.	1	38	50.53	21.72
	2	34	49.81	17.96
	3	35	54.73	18.81
	4	35	39.63	18.67
	5	38	48.29	10.34
	6	39	56.78	23.60
	7	37	60.77	12.45
	8	40	62.35	29.97
	9	36	41.01	16.38
	10	36	56.48	29.76
	Mean±S.E.M	36.80±0.61	52.04±2.42	19.97±2.06

Group	Number	Weight (g)	Licking of hind paw (s)	
			Early phase (0-5 min)	Late phase (15-30 min)
MEKG 200 mg/kg, p.o.	1	34	33.38	24.88
	2	38	34.28	23.53
	3	38	30.49	21.91
	4	33	26.19	16.52
	5	35	49.09	17.30
	6	38	43.19	18.01
	7	37	51.61	21.67
	8	38	37.54	20.94
	9	32	28.81	17.18
	10	36	24.41	18.88
	Mean±S.E.M	35.90±0.72	35.90±2.97	20.22±0.96

Effects of the methanol extract of *Kaempferia galanga* (MEKG), morphine and naloxone on nociceptive responses in hot plate test in mice.

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Control (cosolvent), p.o.	1	34	6.8	7.5	9.0	9.6	9.9	8.1
	2	36	9.1	9.1	8.9	8.6	8.4	9.5
	3	39	8.9	9.7	7.1	8.8	8.9	8.3
	4	40	7.3	8.9	7.4	10.0	9.1	6.9
	5	40	8.9	8.7	9.3	9.9	10.9	8.4
	6	30	6.4	8.1	9.3	9.8	9.6	7.2
	7	40	6.6	7.6	8.4	9.5	9.7	8.9
	8	33	8.2	8.2	8.8	9.1	9.3	9.5
	9	29	8.0	8.7	8.9	8.6	8.6	10.3
	10	36	8.4	9.1	10.0	8.0	9.8	10.3
	Mean±S.E.M.	36±1.31	7.86±0.32	8.56±0.22	8.71±0.28	9.19±0.21	9.42±0.23	8.74±0.37

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Morphine 5 mg/kg, s.c.	1	38	8.5	9.5	11.7	14.2	16.5	16.4
	2	40	9.3	12.8	13.4	17.8	15.9	18.0
	3	34	8.8	10.2	16.2	16.9	16.6	17.5
	4	32	8.5	9.4	13.5	16.1	17.8	12.0
	5	37	7.6	9.4	14.2	18.9	18.5	15.7
	6	38	8.6	9.9	11.6	18.3	15.7	15.6
	7	34	9.6	11.4	14.2	19.5	16.3	11.4
	8	35	7.3	11.2	15.6	16.2	19.4	12.5
	9	39	9.3	10.0	14.5	19.3	20.0	14.2
	10	38	9.7	12.3	18.8	20.2	18.2	13.8
	Mean±S.E.M.	36.50±0.82	8.72±0.25	10.61±0.39	14.37±0.68	17.74±0.59	17.49±0.48	14.71±0.73

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Naloxone 2 mg/kg, i.p.	1	39	9.5	9.3	7.6	9.4	9.1	9.7
	2	34	9.8	8.8	8.7	8.1	10.2	8.3
	3	31	9.7	8.3	8.7	8.8	8.4	9.1
	4	37	8.9	9.6	9.3	9.6	8.5	8.7
	5	38	8.3	8.9	9.5	10.5	9.2	8.5
	6	40	8.9	9.3	8.2	8.7	8.6	8.6
	7	38	7.5	7.9	9.1	9.9	9.1	8.4
	8	37	8.0	9.7	10.2	8.1	8.6	9.4
	9	37	8.9	9.3	9.2	7.8	8.1	8.5
	10	31	8.4	8.7	8.8	8.8	7.9	8.9
	Mean±S.E.M.	36.20±1.00	8.79±0.24	8.98±0.18	8.93±0.23	8.97±0.27	8.77±0.21	8.81±0.15

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
MEKG 50 mg/kg, p.o.	1	36	8.6	7.6	7.6	8.8	11.1	12.0
	2	36	8.8	9.9	10.6	9.9	11.8	9.9
	3	35	8.9	9.0	10.3	8.6	10.6	10.6
	4	31	6.8	8.3	8.4	8.9	9.8	10.3
	5	38	8.9	8.6	8.8	10.1	12.4	13.0
	6	35	8.4	7.9	7.8	8.3	9.5	9.4
	7	35	8.7	9.8	9.6	9.6	10.1	11.7
	8	31	8.1	8.6	9.5	10.6	12.7	10.9
	9	40	8.4	9.8	9.9	10.3	10.9	10.4
	10	35	7.3	8.9	8.5	8.4	8.5	9.5
	Mean±S.E.M.	35.20±0.87	8.29±0.22	8.84±0.25	9.10±0.33	9.35±0.27	10.74±0.42	10.77±0.37



Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
MEKG 100 mg/kg, p.o.	1	35	8.9	7.5	9.5	9.5	10.10	11.1
	2	35	7.6	7.4	8.8	9.9	10.8	10.6
	3	37	9.4	8.7	9.1	9.8	9.2	10.8
	4	32	8.8	10.7	9.5	10.2	10.4	10.6
	5	35	9.8	10.5	10.8	10.8	9.9	12.7
	6	35	8.8	10.1	10.4	9.7	9.7	10.4
	7	40	9.7	10.6	9.7	10.1	12.2	11.3
	8	34	9.1	8.4	9.1	10.2	10.7	11.6
	9	32	9.9	10.7	10.3	10.9	11.4	12.9
	10	37	8.3	10.2	10.5	10.4	9.2	12.5
	Mean±S.E.M.	35.20±0.76	9.03±0.23	9.48±0.42	9.77±0.22	10.15±0.14	10.36±0.30	11.45±0.30

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
MEKG 200 mg/kg, p.o.	1	36	9.3	11.2	9.1	14.0	11.4	12.4
	2	34	7.9	9.3	11.0	13.2	12.1	13.7
	3	37	8.4	9.8	10.6	13.3	14.3	12.6
	4	38	8.4	9.2	11.3	11.5	12.2	13.3
	5	36	8.2	9.9	11.1	11.8	14.0	11.3
	6	34	8.5	8.2	12.0	14.5	14.6	13.8
	7	35	9.0	8.1	10.2	10.3	14.0	13.3
	8	36	8.8	11.3	9.8	12.9	12.7	12.5
	9	37	8.7	10.1	10.9	12.0	13.7	10.6
	10	32	7.0	10.0	9.7	10.8	14.8	15.2
	Mean±S.E.M.	35.50±0.56	8.42±0.20	9.71±0.34	10.57±0.27	12.43±0.43	13.38±0.37	12.87±0.41

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Naloxone 2 mg/kg, i.p. + Morphine 5 mg/kg, p.o.	1	38	7.7	10.0	11.2	11.1	11.0	10.2
	2	37	9.7	8.6	8.6	8.1	10.1	12.2
	3	31	7.4	7.1	7.8	10.0	9.0	7.4
	4	33	9.6	10.2	8.7	8.3	9.8	10.5
	5	35	9.6	9.6	10.5	9.0	8.6	10.7
	6	36	9.2	11.6	10.5	10.0	8.3	10.7
	7	34	10.0	10.8	9.4	8.5	11.3	11.4
	8	38	9.9	11.5	11.1	9.4	10.8	12.6
	9	39	7.7	7.7	8.1	10.7	9.9	8.2
	10	35	9.0	8.6	10.2	11.2	12.3	10.4
	Mean±S.E.M.	35.60±0.79	8.98±0.32	9.57±0.49	9.61±0.40	9.63±0.36	10.11±0.40	10.43±0.51

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Naloxone 2 mg/kg, i.p. + MEKG 200 mg/kg, p.o.	1	32	9.4	9.8	12.9	13.4	12.7	12.2
	2	38	9.5	8.4	9.8	11.9	12.6	9.9
	3	38	9.2	10.0	10.3	9.7	10.3	7.7
	4	31	9.4	8.5	10.2	11.3	11.8	10.2
	5	36	7.0	12.3	10.7	9.9	12.7	9.8
	6	37	7.9	13.1	12.3	11.0	9.1	9.6
	7	38	9.4	12.9	11.5	13.2	10.7	12.9
	8	35	8.1	8.6	7.7	7.1	7.8	7.6
	9	37	9.9	9.8	10.6	13.5	11.8	8.6
	10	36	8.3	9.4	10.5	11.7	12.7	12.8
	Mean±S.E.M.	35.80±0.79	8.81±0.29	10.28±0.57	10.65±0.45	11.27±0.63	11.22±0.54	10.13±0.62

Effects of the methanol extract of *Kaempferia galanga* (MEKG), morphine and naloxone on nociceptive responses in the tail flick test in rats.

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Control (cosolvent), p.o.	1	142	1.4	1.2	1.4	1.4	1.2	1.2
	2	143	1.2	1.2	1.4	1.2	1.3	1.1
	3	153	1.3	1.3	1.1	1.2	1.2	1.2
	4	162	1.4	1.5	1.4	1.2	1.2	1.4
	5	150	1.2	1.4	1.2	1.1	1.2	1.2
	6	147	1.4	1.2	1.3	1.4	1.2	1.4
	7	152	1.4	1.2	1.1	1.4	1.2	1.2
	8	153	1.3	1.4	1.4	1.3	1.2	1.3
	9	157	1.4	1.4	1.3	1.1	1.2	1.2
	10	149	1.3	1.3	1.1	1.3	1.2	1.2
	Mean±S.E.M.	150.80±1.92	1.33±0.03	1.31±0.03	1.27±0.05	1.26±0.04	1.21±0.10	1.24±0.03

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Morphine 5 mg/kg, s.c.	1	164	1.4	2.6	3.6	4.2	3.7	3.3
	2	148	1.4	2.4	3.5	4.8	3.4	3.1
	3	168	1.5	2.5	3.6	4.5	3.4	3.5
	4	157	1.3	2.4	3.9	4.3	3.5	3.3
	5	141	1.3	2.7	3.4	4.4	3.8	3.2
	6	163	1.4	2.4	3.3	4.5	3.6	3.2
	7	167	1.3	2.5	3.4	4.4	3.2	3.4
	8	152	1.4	2.3	3.6	4.3	3.9	3.3
	9	158	1.5	2.2	3.6	4.3	3.8	3.1
	10	153	1.3	2.3	3.6	4.2	3.5	2.9
	Mean±S.E.M.	157.10±2.76	1.38±0.02	2.43±0.05	3.55±0.05	4.39±0.06	3.58±0.07	3.23±0.05

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Naloxone 2 mg/kg, i.p.	1	149	1.4	1.4	1.3	1.2	1.4	1.4
	2	158	1.5	1.4	1.4	1.5	1.4	1.2
	3	142	1.4	1.3	1.2	1.2	1.2	1.4
	4	160	1.4	1.4	1.3	1.4	1.3	1.4
	5	166	1.2	1.2	1.3	1.3	1.3	1.4
	6	168	1.4	1.2	1.3	1.4	1.2	1.4
	7	165	1.3	1.2	1.3	1.4	1.3	1.3
	8	165	1.2	1.2	1.3	1.4	1.4	1.3
	9	168	1.3	1.2	1.3	1.4	1.4	1.4
	10	141	1.2	1.2	1.3	1.2	1.3	1.3
	Mean±S.E.M.	158.20±3.32	1.33±0.03	1.27±0.03	1.30±0.01	1.34±0.03	1.32±0.02	1.35±0.02

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
MEKG 50 mg/kg, p.o.	1	159	1.2	1.3	1.4	1.5	1.4	1.5
	2	153	1.2	1.3	1.4	1.4	1.4	1.3
	3	155	1.4	1.4	1.5	1.4	1.4	1.3
	4	161	1.4	1.4	1.4	1.4	1.4	1.3
	5	158	1.2	1.2	1.5	1.6	1.4	1.4
	6	159	1.2	1.2	1.3	1.4	1.4	1.3
	7	162	1.2	1.5	1.5	1.5	1.4	1.4
	8	157	1.4	1.3	1.4	1.3	1.3	1.3
	9	156	1.2	1.2	1.3	1.4	1.5	1.3
	10	157	1.4	1.4	1.5	1.5	1.5	1.3
	Mean±S.E.M.	157.70±0.86	1.28±0.03	1.32±0.03	1.42±0.02	1.46±0.02	1.41±0.02	1.34±0.02



Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
MEKG 100 mg/kg, p.o.	1	152	1.3	1.3	1.3	1.4	1.3	1.3
	2	151	1.3	1.2	1.3	1.3	1.4	1.4
	3	156	1.4	1.3	1.3	1.4	1.3	1.3
	4	148	1.2	1.4	1.4	1.4	1.4	1.4
	5	142	1.3	1.5	1.4	1.4	1.3	1.2
	6	154	1.3	1.4	1.4	1.5	1.5	1.3
	7	150	1.2	1.3	1.3	1.4	1.4	1.3
	8	163	1.2	1.3	1.3	1.3	1.4	1.4
	9	141	1.3	1.3	1.3	1.3	1.4	1.3
	10	144	1.3	1.3	1.3	1.3	1.3	1.2
	Mean±S.E.M.	150.10±2.14	1.28±0.02	1.33±0.03	1.33±0.02	1.37±0.02	1.37±0.02	1.31±0.02

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
MEKG 200 mg/kg, p.o.	1	150	1.2	1.4	1.4	1.4	1.5	1.4
	2	145	1.3	1.4	1.5	1.5	1.4	1.3
	3	156	1.2	1.3	1.4	1.4	1.4	1.3
	4	153	1.3	1.3	1.4	1.4	1.4	1.3
	5	148	1.2	1.4	1.4	1.4	1.5	1.2
	6	156	1.3	1.5	1.5	1.3	1.4	1.3
	7	143	1.4	1.5	1.6	1.5	1.4	1.4
	8	146	1.3	1.3	1.5	1.5	1.3	1.3
	9	153	1.2	1.3	1.4	1.4	1.4	1.3
	10	151	1.3	1.5	1.5	1.4	1.4	1.4
	Mean±S.E.M.	150.10±1.43	1.27±0.02	1.39±0.03	1.46±0.02	1.42±0.02	1.41±0.02	1.32±0.02

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Naloxone 2 mg/kg, i.p. + Morphine 5 mg/kg, s.c.	1	184	1.4	1.7	1.6	1.4	1.5	1.2
	2	153	1.5	1.7	1.6	1.4	1.3	1.2
	3	158	1.2	1.6	1.6	1.5	1.3	1.5
	4	146	1.4	1.4	1.5	1.3	1.5	1.5
	5	152	1.4	1.4	1.4	1.5	1.4	1.3
	6	156	1.3	1.5	1.4	1.4	1.4	1.2
	7	150	1.4	1.5	1.5	1.5	1.4	1.3
	8	143	1.4	1.5	1.3	1.5	1.4	1.5
	9	144	1.4	1.8	1.5	1.3	1.4	1.5
	10	151	1.2	1.8	1.6	1.4	1.5	1.3
Mean±S.E.M.		150.10±1.56	1.36±0.03	1.59±0.05	1.50±0.03	1.42±0.02	1.41±0.02	1.35±0.04

Group	Number	Weight (g)	Latency of nociceptive response (s)					
			Initial response	30 min	45 min	60 min	75 min	90 min
Naloxone 2 mg/kg, i.p. + MEKG 200 mg/kg, p.o.	1	161	1.3	1.4	1.3	1.5	1.3	1.2
	2	157	1.2	1.2	1.3	1.2	1.3	1.3
	3	142	1.3	1.2	1.5	1.2	1.2	1.4
	4	153	1.5	1.4	1.2	1.3	1.2	1.2
	5	144	1.4	1.3	1.2	1.2	1.4	1.2
	6	147	1.3	1.2	1.2	1.2	1.2	1.2
	7	160	1.5	1.4	1.3	1.5	1.4	1.2
	8	153	1.3	1.2	1.4	1.2	1.3	1.3
	9	154	1.4	1.2	1.3	1.2	1.3	1.3
	10	149	1.2	1.3	1.2	1.3	1.3	1.3
	Mean±S.E.M.	152.00±2.04	1.34±0.03	1.28±0.03	1.29±0.03	1.28±0.04	1.29±0.02	1.26±0.02

Effects of the methanol extract of *Kaempferia galanga* (MEKG) and aspirin on Brewer's yeast induce pyrexia in rats.

Group	Number	Weight (g)	Rectal temperature (° c)						
			Before yeast injection.	After treatment					
				0 h	1 h	2 h	3 h	4 h	5 h
Control (cosolvent), p.o.	1	181	37.4	38.4	37.7	37.7	37.8	37.6	37.6
	2	165	36.8	37.7	37.3	37.2	37.2	37.5	37.2
	3	196	37.2	38.1	37.9	37.7	38.0	37.9	37.4
	4	176	36.8	37.5	37.6	37.8	37.4	37.4	37.4
	5	183	36.7	37.8	38.1	37.8	37.6	37.3	38.1
	6	143	36.4	37.1	37.5	37.5	37.5	37.8	38.6
	7	158	36.5	37.2	37.4	37.1	36.7	37.2	37.4
	8	140	36.5	37.2	37.2	37.2	37.4	37.2	37.5
	9	141	36.5	37.2	37.2	37.3	37.2	37.2	37.3
	10	148	37.1	37.1	37.5	37.4	37.6	37.4	37.3
	Mean±S.E.M.	163.10±6.37	36.79±0.11	37.53±0.14	37.54±0.09	37.47±0.08	37.44±0.11	37.45±0.08	37.58±0.14

Group	Number	Weight (g)	Rectal temperature (° c)						
			Before yeast injection.	After treatment					
				0 h	1 h	2 h	3 h	4 h	5 h
Aspirin 100 mg/kg, p.o.	1	192	37.0	37.6	37.2	37.2	36.9	36.3	36.8
	2	181	36.8	37.8	37.0	36.7	36.1	36.1	36.7
	3	175	37.0	37.7	37.0	36.8	36.3	36.7	36.4
	4	165	36.8	37.7	36.4	36.4	36.6	36.1	36.0
	5	189	36.9	37.7	37.4	37.3	37.5	37.4	37.2
	6	189	36.3	37.0	37.4	37.3	37.5	37.3	37.3
	7	141	36.6	37.4	37.2	37.1	37.3	37.1	37.4
	8	154	36.5	37.2	37.1	37.2	37.0	36.8	36.4
	9	144	36.7	37.5	37.1	37.1	36.6	36.7	36.9
	10	148	36.5	37.2	36.7	36.6	36.7	36.9	36.9
	Mean±S.E.M.	167.80±6.31	36.71±0.07	37.48±0.09	37.05±0.10	36.97±0.10	36.85±0.15	36.74±0.15	36.80±0.14

Group	Number	Weight (g)	Rectal temperature (° c)						
			Before yeast injection.	After treatment					
				0 h	1 h	2 h	3 h	4 h	5 h
MEKG 50 mg/kg, p.o.	1	176	36.8	37.7	37.6	37.6	37.3	37.2	36.7
	2	175	37.0	37.7	37.8	37.9	37.3	37.3	37.2
	3	156	36.7	37.4	37.3	37.1	37.2	36.9	36.9
	4	165	36.8	37.6	37.3	37.6	37.3	37.3	36.4
	5	167	36.7	37.6	37.5	37.6	37.5	37.2	37.7
	6	173	36.8	36.6	37.5	37.5	37.1	37.2	37.6
	7	142	36.6	36.3	37.6	37.3	36.9	37.0	36.7
	8	160	36.6	37.4	36.9	37.0	36.7	37.0	36.5
	9	159	36.8	37.5	37.0	36.6	36.2	36.5	36.8
	10	160	36.2	37.1	37.0	37.0	36.7	36.3	37.1
	Mean±S.E.M.	163.30±3.26	36.70±0.07	37.29±0.15	37.35±0.10	37.32±0.12	37.02±0.12	36.99±0.11	36.96±0.14

Group	Number	Weight (g)	Rectal temperature (° c)						
			Before yeast injection.	After treatment					
				0 h	1 h	2 h	3 h	4 h	5 h
MEKG 100 mg/kg, p.o.	1	175	36.8	38.1	36.7	37.5	37.5	36.9	37.2
	2	181	36.8	37.6	38.3	37.2	37.3	36.5	36.3
	3	156	36.8	37.5	37.3	37.2	37.2	36.6	36.6
	4	150	36.7	37.4	37.7	37.2	37.3	36.7	36.3
	5	193	37.0	37.7	37.6	37.5	37.7	36.6	37.8
	6	190	37.1	37.8	38.0	38.3	37.7	38.2	38.0
	7	142	36.8	37.5	37.5	37.5	37.2	37.1	37.0
	8	152	36.4	37.2	37.8	37.2	37.1	37.3	37.1
	9	150	36.1	37.1	37.1	36.9	36.6	36.5	36.9
	10	160	36.7	37.6	37.3	36.5	36.8	37.2	36.6
	Mean±S.E.M.	164.90±5.79	36.72±0.09	37.55±0.09	37.53±0.15	37.30±0.15	37.24±0.11	36.96±0.17	36.98±0.18



Group	Number	Weight (g)	Rectal temperature (° c)						
			Before yeast injection.	After treatment					
				0 h	1 h	2 h	3 h	4 h	5 h
MEKG 200 mg/kg, p.o.	1	171	36.9	38.0	38.3	37.9	37.7	36.8	37.2
	2	167	36.8	38.2	38.0	37.1	37.1	37.0	37.2
	3	160	37.0	37.5	37.0	37.3	37.1	35.6	36.4
	4	168	36.8	37.7	37.7	37.4	36.9	36.8	36.3
	5	173	36.8	37.5	37.3	37.4	37.6	38.3	38.3
	6	160	36.8	37.6	37.6	37.7	37.4	37.5	37.6
	7	146	36.5	37.2	37.8	37.4	37.2	37.5	36.8
	8	146	36.7	37.4	37.5	37.8	37.1	37.3	37.2
	9	168	36.1	37.2	37.1	36.8	36.8	37.2	36.7
	10	154	36.6	37.6	37.4	37.1	37.2	36.4	37.2
	Mean±S.E.M.	161.30±3.12	36.70±0.08	37.59±0.10	37.57±0.13	37.39±0.39	37.21±0.09	37.04±0.23	37.09±0.19

Effects of the methanol extract of *Kaempferia galanga* (MEKG) and aspirin on carrageenan-induced paw edema in rats.

Group	Number	Weight(g)	Paw edema volume (ml)						
			Initial	0.5 h	1 h	2 h	3 h	4 h	5 h
Control (Cosolvent), p.o.	1	161	3.64	4.39	5.71	6.59	6.63	6.14	6.21
	2	173	3.82	4.75	6.27	6.71	6.98	6.28	6.62
	3	162	3.72	4.79	5.89	5.59	5.99	6.89	6.96
	4	158	3.22	4.80	5.64	6.98	6.69	6.41	6.16
	5	176	4.88	5.17	5.26	6.68	6.44	6.48	6.54
	6	175	4.89	5.32	5.56	6.92	6.77	6.92	6.78
	7	158	3.39	4.28	4.34	5.40	6.67	6.68	6.68
	8	163	3.69	4.20	4.36	5.61	6.81	6.66	6.41
	Mean±S.E.M.	165.75±2.70	3.91±0.22	4.71±0.14	5.38±0.25	6.31±0.23	6.62±0.11	6.56±0.10	6.55±0.10

Group	Number	Weight(g)	Paw edema volume (ml)						
			Initial	0.5 h	1 h	2 h	3 h	4 h	5 h
Aspirin 100 mg/kg, p.o.	1	164	3.82	4.64	4.80	5.25	5.33	5.53	5.72
	2	156	3.45	4.62	4.80	5.44	5.25	5.27	4.61
	3	152	3.26	4.19	4.34	4.44	4.48	5.37	5.26
	4	163	3.71	3.46	4.17	4.42	4.62	5.02	4.73
	5	171	3.88	4.28	4.26	4.28	4.72	4.34	4.54
	6	176	4.75	5.26	5.24	4.81	4.69	4.94	4.81
	7	172	4.34	4.95	4.93	4.93	5.89	4.87	4.98
	8	159	3.77	4.25	4.28	4.27	4.54	4.55	4.98
	Mean±S.E.M.	164.13±2.96	3.87±0.17	4.46±0.19	4.60±0.14	4.73±0.16	4.94±0.18	4.99±0.14	4.95±0.14

Group	Number	Weight(g)	Paw edema volume (ml)						
			Initial	0.5 h	1 h	2 h	3 h	4 h	5 h
MEKG 50 mg/kg, p.o.	1	154	3.72	4.11	6.28	6.24	6.35	6.42	6.32
	2	151	3.48	3.70	4.85	5.42	6.10	5.98	3.06
	3	156	3.70	4.19	5.26	5.96	5.76	6.05	5.55
	4	155	3.56	4.13	4.78	4.99	5.30	5.91	5.90
	5	152	3.45	4.02	4.40	4.99	6.94	6.82	6.58
	6	177	4.81	5.06	5.69	5.72	5.89	5.93	6.08
	7	175	4.69	5.21	5.62	5.94	5.37	5.25	6.09
	8	163	3.61	4.49	4.30	5.44	4.25	4.95	5.65
	Mean±S.E.M.	160.38±3.64	3.88±0.19	4.36±0.19	5.15±0.24	5.59±0.16	5.75±0.28	5.91±0.21	6.03±0.12

Group	Number	Weight(g)	Paw edema volume (ml)						
			Initial	0.5 h	1 h	2 h	3 h	4 h	5 h
MEKG 100 mg/kg, p.o.	1	164	3.65	3.97	4.92	4.97	4.80	5.31	5.82
	2	168	3.80	4.24	5.94	5.79	6.38	6.04	6.32
	3	150	3.16	4.12	4.39	4.91	5.26	5.26	5.26
	4	156	3.58	3.85	4.30	5.15	5.19	5.40	5.46
	5	170	4.25	5.04	5.17	6.45	6.78	6.34	6.76
	6	173	4.43	4.68	4.90	4.94	5.57	5.62	6.10
	7	174	4.51	5.19	5.22	5.98	5.65	5.52	5.55
	8	158	3.55	4.67	4.85	5.86	5.81	6.15	6.17
	Mean±S.E.M.	164.13±3.07	3.87±0.17	4.47±0.18	4.96±0.18	5.51±0.21	5.68±0.23	5.71±0.15	5.93±0.18

Group	Number	Weight(g)	Paw edema volume (ml)						
			Initial	0.5 h	1 h	2 h	3 h	4 h	5 h
MEKG 200 mg/kg, p.o.	1	163	3.66	4.46	5.19	6.05	5.98	5.61	5.60
	2	169	3.92	4.61	5.49	5.59	5.70	6.37	6.26
	3	153	3.27	3.48	4.25	4.47	4.41	4.12	4.45
	4	162	3.61	3.94	4.45	4.84	5.12	5.03	4.88
	5	170	4.17	4.81	5.27	5.52	6.39	5.91	5.38
	6	173	4.33	5.29	5.52	5.22	5.58	5.58	5.85
	7	174	4.40	5.10	5.40	5.96	5.58	5.45	5.48
	8	177	4.77	5.27	5.47	6.07	5.50	5.79	5.58
	Mean±S.E.M.	167.63±2.78	4.02±0.17	4.62±0.23	5.13±0.18	5.47±0.21	5.53±0.21	5.48±0.24	5.44±0.20

Effects of the methanol extract of *Kaempferia galanga* (MEKG) and aspirin on cotton pellet-induced granuloma formation in rats.

Group	Number	Granuloma wet weight (mg)	Granuloma dry weight (mg)	Transudative weigh (mg)	Granuloma weight (mg/mg cotton)
Control (cosolvent), p.o.	1	96.5	35.6	60.9	1.78
	2	94.3	34.2	60.1	1.71
	3	91.8	33.4	58.4	1.67
	4	92.4	33.2	59.2	1.66
	5	92.8	33.0	59.8	1.65
	6	93.2	32.2	61.0	1.61
	7	96.8	34.0	62.8	1.70
	8	95.6	32.6	63.0	1.63
	Mean±S.E.M.	94.18±	33.53±0.34	60.65±0.51	1.68±0.02

Group	Number	Granuloma wet weight (mg)	Granuloma dry weight (mg)	Transudative weigh (mg)	Granuloma weight (mg/mg cotton)
Aspirin 100 mg/kg, p.o.	1	61.7	24.3	37.4	1.22
	2	64.1	25.9	38.2	1.30
	3	66.8	24.8	42.0	1.24
	4	66.6	24.3	42.3	1.22
	5	58.5	24.2	34.3	1.21
	6	58.6	23.9	34.7	1.20
	7	60.7	24.0	36.7	1.20
	8	63.9	24.5	39.4	1.23
	Mean±S.E.M.	62.61±1.03	24.49±0.20	38.13±0.95	1.22±0.01



Group	Number	Granuloma wet weight (mg)	Granuloma dry weight (mg)	Transudative weigh (mg)	Granuloma weight (mg/mg cotton)
MEKG 50 mg/kg, p.o.	1	81.3	30.2	51.1	1.51
	2	78.9	29.8	49.1	1.49
	3	81.3	30.1	51.2	1.51
	4	82.7	28.9	53.8	1.45
	5	83.3	29.7	53.6	1.49
	6	81.6	29.8	51.8	1.49
	7	82.4	28.8	53.6	1.44
	8	83.0	28.2	54.8	1.41
	Mean±S.E.M.	81.81±0.44	29.44±0.23	52.38±0.60	1.47±0.01

Group	Number	Granuloma wet weight (mg)	Granuloma dry weight (mg)	Transudative weigh (mg)	Granuloma weight (mg/mg cotton)
MEKG 100 mg/kg, p.o.	1	73.0	26.4	46.6	1.32
	2	71.4	26.9	44.5	1.35
	3	74.3	27.6	46.7	1.38
	4	73.9	27.4	46.5	1.37
	5	75.4	28.9	46.5	1.45
	6	70.3	26.3	44.0	1.32
	7	73.6	26.7	46.9	1.34
	8	76.3	28.8	47.5	1.44
	Mean±S.E.M.	73.53±0.62	27.38±0.32	46.15±0.39	1.37±0.02

Group	Number	Granuloma wet weight (mg)	Granuloma dry weight (mg)	Transudative weigh (mg)	Granuloma weight (mg/mg cotton)
MEKG 200 mg/kg, p.o.	1	68.1	25.3	42.8	1.27
	2	68.5	25.8	42.7	1.29
	3	65.1	24.6	40.5	1.23
	4	68.5	25.2	43.3	1.26
	5	66.6	24.6	42.0	1.23
	6	68.5	25.1	43.4	1.26
	7	66.8	24.8	42.0	1.24
	8	65.2	24.7	40.5	1.24
	Mean±S.E.M.		67.16±0.46	25.01±0.13	42.15±0.36