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Results of 31 chemicals using LLNA-DA method

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Abbreviations

AOO	Acetone/olive oil (4:1, v/v)
ACE	Acetone
DMF	<i>N,N</i> -Dimethyl formamide
DMSO	Dimethyl sulfoxide
RLU	Relative light unit
P. C.	Positive control
SI	Stimulation index

Chemicals and its CAS RNs.

	Chemical name		CAS RN
1	2,4-Dinitrochlorobenzene	DNCB	97-00-7
2	<i>p</i> -Phenylenediamine		106-50-3
3	Tolylene-2,4-diisocyanate	TDI	584-84-9
4	Glutaraldehyde		111-30-8
5	Potassium dichromate	$K_2Cr_2O_7$	7778-50-9
6	Trimellitic anhydride	TMA	552-30-7
7	Pthalic anhydride		85-44-9
8	Formaldehyde		50-00-0
9	Cinnamic aldehyde		14371-10-9
10	Isoeugenol		97-54-1
11	Cobalt(II) chloride	$CoCl_2$	7646-79-9
12	Eugenol		97-53-0
13	Resorcinol		108-46-3
14	Benzocaine		94-09-7
15	Abietic acid		514-10-3
16	Hexylcinnamic aldehyde	HCA	101-86-0
17	Imidazolidinyl urea		39236-46-9
18	2-Mercaptobenzothiazol	MBT	149-30-4
19	Citral		5392-40-5
20	Hydroxycitronellal		107-75-5
21	Sodium lauryl sulfate	SLS	151-21-3
22	Nickel(II) sulfate hexahydrate	$NiSO_4$	10101-97-0
23	Benzalkonium chloride		8001-54-5
24	Propyl 4-hydroxybenzoate	Propyl paraben	94-13-3
25	Diethylphthalate		84-66-2
26	1-Bromobutane		109-65-9
27	Methsalicylate		119-36-8
28	Chlorobenzene		108-90-7
29	Lactic acid		50-21-5
30	Hexane		110-54-3
31	Isopropanol	IPA	67-63-0

Table 1 Result of LLNA-DA (2,4-Dinitrochlorobenzene, DNCB) Vehicle; AOO (acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: September 10, 2003

Date of measurement: September 17, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	23.7	2.99	3.35	0.73	1.00	0.22	1453	2975	1611	1.00	0.54
	24.0	4.15					11748*				
	23.3	3.74					4663				
	25.0	2.53					2810				
P. C.	23.6	7.51	10.26	2.04	3.06	0.61	13351	17292	6621	5.81	2.23
	22.4	12.44					27023				
	24.5	10.52					15905				
	22.3	10.57					12892				
DNCB 0.025%	22.1	8.80	6.87	1.68	2.05	0.50	11884	9610	3321	3.23	1.12
	24.7	6.13					11146				
	22.8	5.69					5799				
DNCB 0.05%	23.4	6.85	6.88	0.20	2.05	0.06	10848	8903	1768	2.99	0.59
	24.8	7.09					7394				
	23.1	6.70					8468				
DNCB 0.1%	22.4	8.73	8.05	0.64	2.40	0.19	13205	9541	3318	3.21	1.12
	23.7	7.96					8679				
	21.9	7.45					6740				
DNCB 0.25%	26.1	21.93	19.65	2.42	5.86	0.72	34300	25618	9402	8.61	3.16
	21.0	19.91					26924				
	20.4	17.11					15631				
DNCB 0.5%	25.3	23.94	26.15	2.40	7.80	0.72	33092	36673	8788	12.33	2.95
	23.3	25.81					46685				
	25.0	28.70					30241				
DNCB 1%	24.6	34.00	32.83	1.46	9.79	0.44	40795	36682	4177	12.33	1.40
	24.0	33.31					36807				
	22.0	31.19					32445				

*The deviation of the value from the average of the historical data is higher than 3SD of the historical data. This is considered to be caused by an operational error in measuring the ATP luminescence. The average shown in the table was calculated with the other three values.

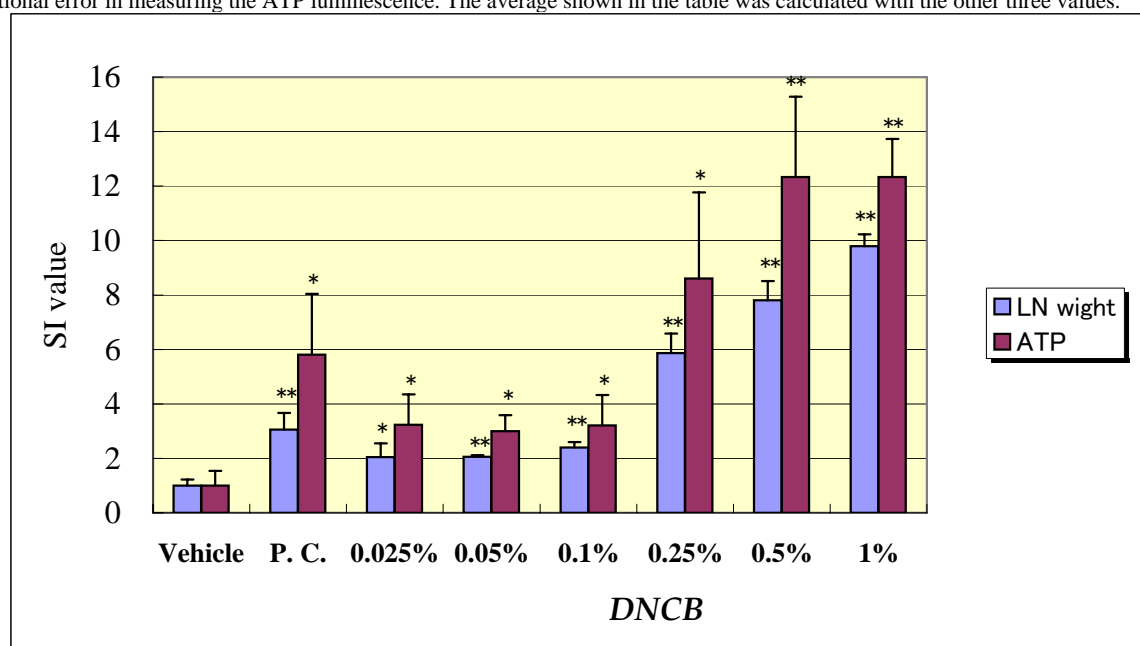


Fig. 1. Result of 2,4-Dinitrochlorobenzene (DNCB) using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 2 Result of LLNA-DA (*p*-Phenylenediamine) Vehicle; AOO (acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrlj mice Female, 9wk
 Date of start: September 5, 2007
 Date of measurement: September 12, 2007

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	23.1	5.22	4.14	0.74	1.00	0.18	4172	2894	955	1.00	0.33
	21.2	3.55					3078				
	19.0	3.98					2136				
	21.4	3.80					2192				
P. C.	25.0	8.94	8.83	0.40	2.13	0.10	10569	11761	1140	4.06	0.39
	21.9	8.36					11027				
	24.3	9.31					12928				
	20.4	8.70					12520				
<i>p</i> -Phenylenediamime 0.1%	22.3	6.18	7.15	0.95	1.73	0.23	8259	10302	1774	3.56	0.61
	23.4	8.08					11194				
	21.8	7.18					11454				
<i>p</i> -Phenylenediamime 0.25%	24.9	8.90	9.81	1.25	2.37	0.30	12197	14864	2346	5.14	0.81
	24.4	11.23					15785				
	23.4	9.30					16610				
<i>p</i> -Phenylenediamime 0.5%	19.6	10.24	8.51	1.71	2.06	0.41	16392	12115	3709	4.19	1.28
	21.8	8.48					9781				
	26.0	6.82					10173				
<i>p</i> -Phenylenediamime 1%	21.8	8.07	8.09	1.00	1.96	0.24	10644	9085	2722	3.14	0.94
	22.7	9.10					10669				
	21.8	7.11					5942				

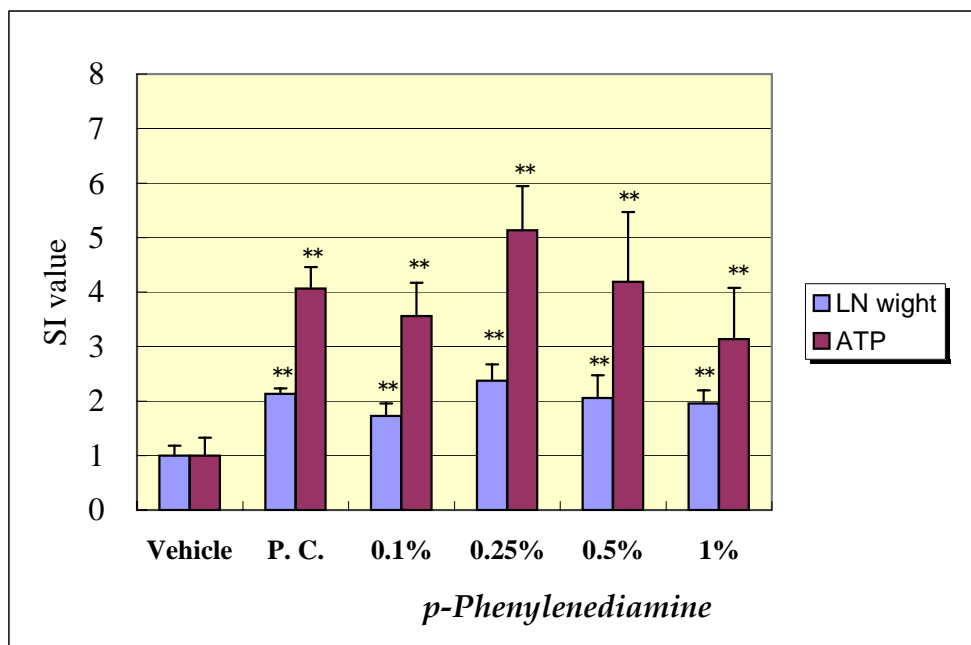


Fig. 2 Result of *p*-Phenylenediamine using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 3 Result of LLNA-DA (Tolylene diisocyanate, TDI) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrJ mice Female, 10wk

Date of start: June 29, 2004

Date of measurement: July 6, 2004

	Body weight (g)	Lymph node wight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.0	3.81	4.07	0.17	1.00	0.04	2370	2818	567	1.00	0.20
	22.9	4.13					3124				
	23.6	4.12					2314				
	22.7	4.20					3464				
P. C.	21.9	6.61	7.98	1.69	1.96	0.41	7739	8116	2302	2.88	0.82
	22.5	10.21					10867				
	20.3	6.74					5290				
	23.4	8.35					8570				
TDI 0.05%	27.2	7.25	8.43	1.67	2.07	0.41	9445	8972	2767	3.18	0.98
	25.3	10.34					11471				
	23.5	7.69					5999				
TDI 0.1%	23.5	10.79	11.97	1.29	2.94	0.32	12732	15632	2661	5.55	0.94
	25.8	13.34					17962				
	25.5	11.78					16204				
TDI 0.25%	22.7	18.96	18.90	2.52	4.65	0.62	25104	27393	2646	9.72	0.94
	24.5	16.36					30291				
	23.9	21.39					26785				

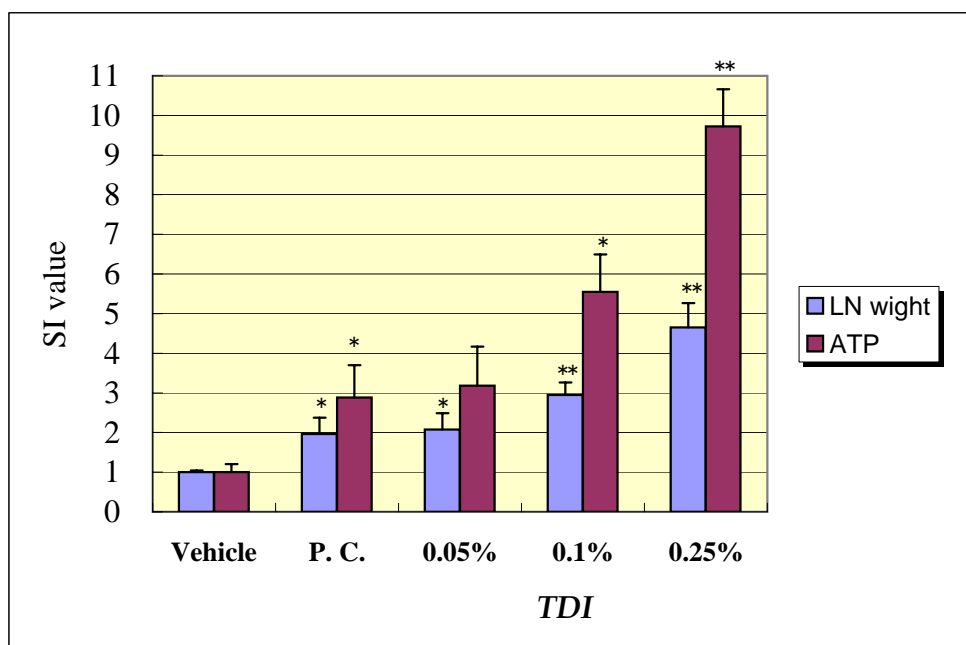


Fig. 3. Result of tolylene diisocyanate (TDI) using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 4 Result of LLNA-DA (Glutaraldehyde) Vehicle; acetone (ACE), P. C.; HCA 15%/ACE.

Animals: CBA JNCrlj mice Female, 10wk
 Date of start: February 8, 2005
 Date of measurement: February 15, 2005

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.6	3.77	3.48	0.36	1.00	0.10	2232	1611	424	1.00	0.26
	25.6	3.20					1509				
	25.7	3.13					1287				
	24.2	3.80					1419				
P. C.	23.3	11.09	11.86	0.70	3.41	0.20	13901	15361	1021	9.53	0.63
	26.1	12.54					16265				
	25.8	11.45					15531				
	23.3	12.37					15749				
Glutaraldehyde 0.05%	21.2	3.30	3.57	0.26	1.03	0.07	1821	1978	184	1.23	0.11
	22.9	3.82					2181				
	20.7	3.58					1931				
Glutaraldehyde 0.1%	22.7	5.48	5.50	1.29	1.58	0.37	5389	4743	2004	2.94	1.24
	22.4	4.22					2496				
	24.6	6.79					6344				
Glutaraldehyde 0.25%	25.3	10.28	7.87	2.09	2.26	0.60	16484	10396	5300	6.45	3.29
	24.3	6.58					6814				
	22.1	6.75					7889				

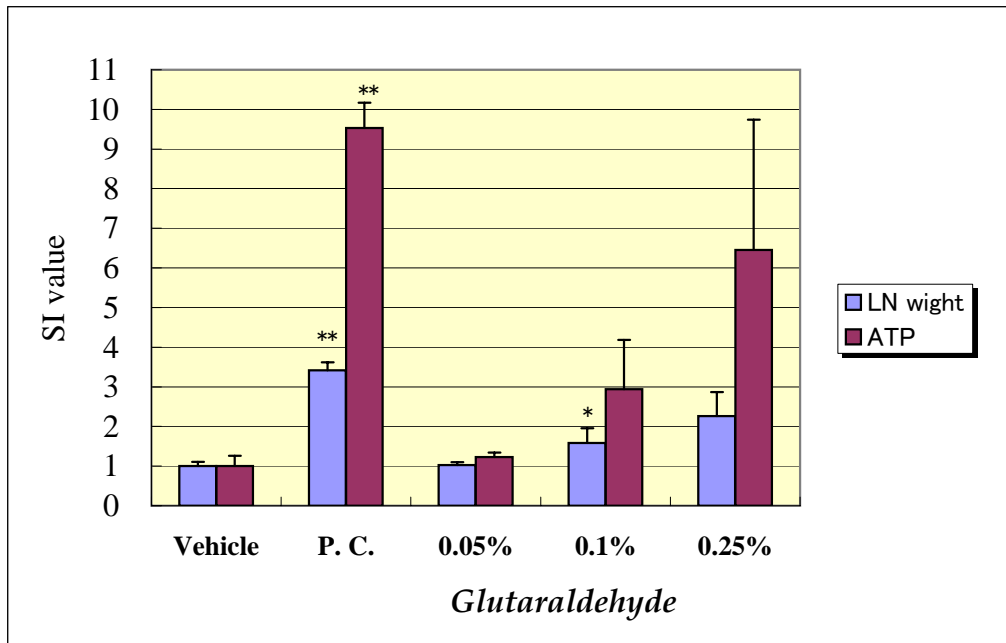


Fig. 4 Result of Glutaraldehyde using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; acetone (ACE), P. C.; HCA 15%/ACE.

Table 5 Result of LLNA-DA (Potassium dichromate, $K_2Cr_2O_7$) Vehicle; DMSO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: April 4, 2006

Date of measurement: April 11, 2006

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)*	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.5	7.23	6.92	1.09	1.00	0.16	82453	64899	18697	1.00	0.29
	26.7	8.12					78192				
	22.5	5.51					42838				
	23.3	6.82					56114				
$K_2Cr_2O_7$ 0.1%	22.4	11.71	12.48	1.39	1.80	0.20	193231	167954	25694	2.59	0.40
	23.5	10.91					140171				
	22.9	13.73					186039				
	24.2	13.55					152378				
$K_2Cr_2O_7$ 0.3%	23.3	16.07	17.06	1.82	2.46	0.26	209189	289546	91904	4.46	1.42
	24.6	15.51					274466				
	24.1	19.61					421230				
	25.3	17.03					253302				
$K_2Cr_2O_7$ 1%	19.5	17.68	22.56	4.51	3.26	0.65	286418	356437	73433	5.49	1.13
	22.6	20.57					304081				
	21.5	28.18					440493				
	21.8	23.80					394755				

*In this experiment, determination of the ATP luminescence was conducted with CheckLite™ 250 Plus (Kikkoman Co., Japan) measurement kit, which is different from the kit used for the other experiments.

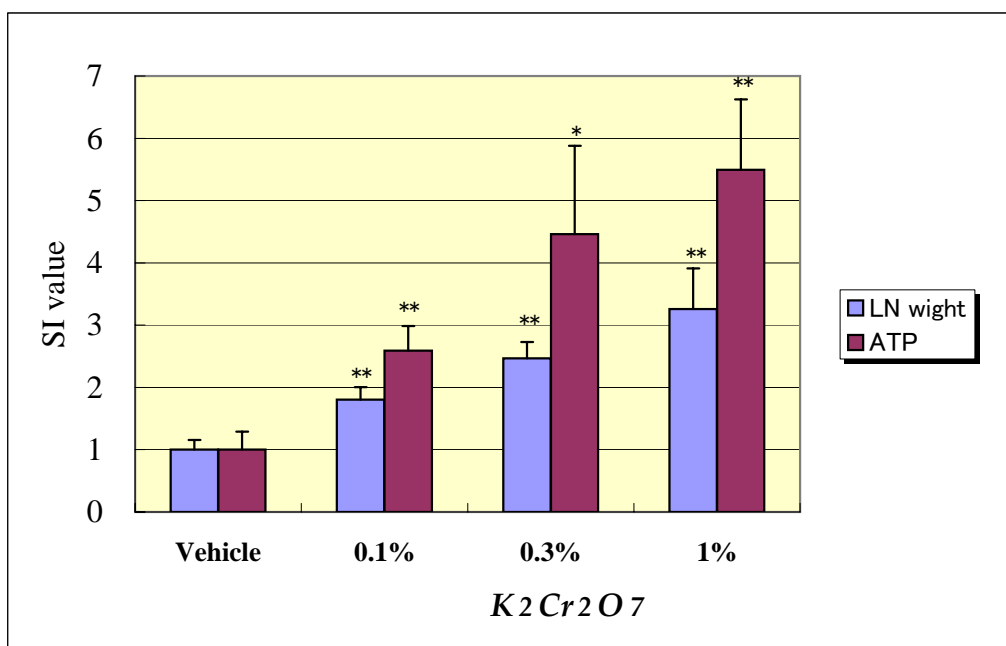


Fig. 5 Result of potassium dichromate ($K_2Cr_2O_7$) using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; DMSO.

Table 6 Result of LLNA-DA (Trimellitic anhydride, TMA) Vehicle; AOO (acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrJ mice Female, 11 wk

Date of start: August 24, 2005

Date of measurement: August 31, 2005

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	22.6	3.30	3.48	0.51	1.00	0.15	3101	3362	736	1.00	0.22
	22.3	3.54					3253				
	23.1	2.93					2687				
	22.9	4.15					4407				
P. C.	21.6	10.21	9.29	0.76	2.67	0.22	22800	19056	2636	5.67	0.78
	24.2	9.42					16696				
	20.7	8.38					17973				
	21.4	9.15					18757				
TMA 0.1%	21.8	4.61	5.76	0.99	1.65	0.29	5681	8272	2831	2.46	0.84
	23.0	6.36					7841				
	24.1	6.30					11293				
TMA 0.25%	22.5	7.46	6.81	0.57	1.96	0.16	13902	12045	1615	3.58	0.48
	23.4	6.43					11270				
	23.6	6.54					10963				
TMA 0.5%	21.9	8.31	9.15	1.18	2.63	0.34	14361	16670	2308	4.96	0.69
	24.4	10.50					18976				
	21.7	8.65					16673				

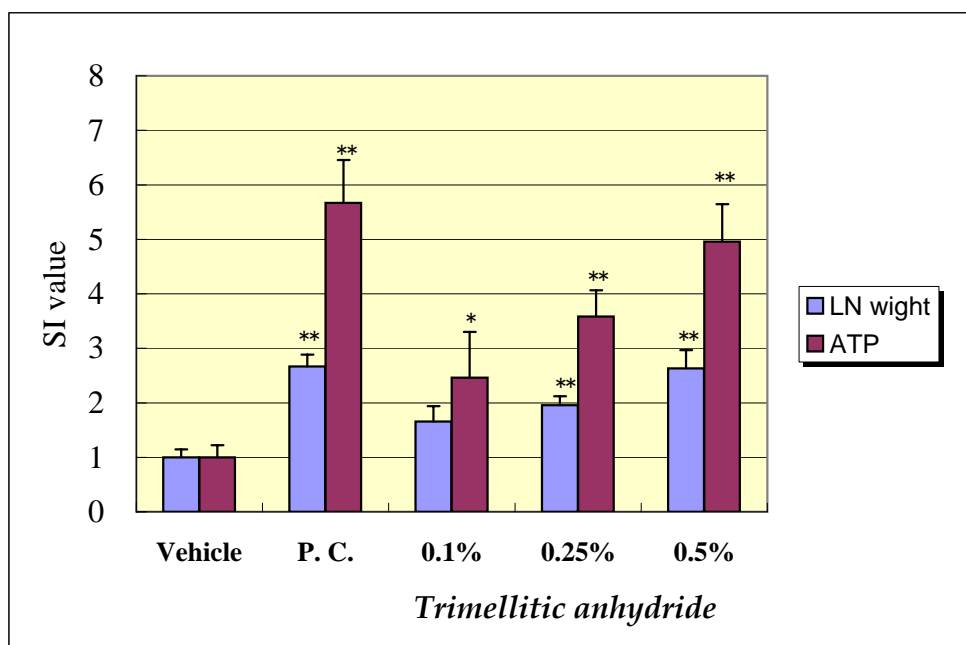


Fig. 6 Result of trimellitic anhydride (TMA) using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 7 Result of LLNA-DA (Pthalic anhydride) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrJ mice Female, 11 wk

Date of start: August 24, 2005

Date of measurement: August 31, 2005

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	22.6	3.30	3.48	0.51	1.00	0.15	3101	3362	736	1.00	0.22
	22.3	3.54					3253				
	23.1	2.93					2687				
	22.9	4.15					4407				
P. C.	21.6	10.21	9.29	0.76	2.67	0.22	22800	19056	2636	5.67	0.78
	24.2	9.42					16696				
	20.7	8.38					17973				
	21.4	9.15					18757				
Pthalic anhydride 0.1%	22.8	5.84	7.26	1.23	2.09	0.35	11304	12272	894	3.65	0.27
	25.1	7.91					13066				
	26.2	8.02					12448				
Pthalic anhydride 0.25%	12.7*	6.34	7.42	1.11	2.13	0.32	8332	11294	3903	3.36	1.16
	23.5	8.56					15717				
	21.6	7.37					9833				
Pthalic anhydride 0.5%	21.5	9.54	10.21	2.65	2.93	0.76	22051	19731	6085	5.87	1.81
	22.0	7.95					12828				
	22.5	13.13					24315				
Pthalic anhydride 1%	24.4	10.95	11.14	2.61	3.20	0.75	19987	23037	8004	6.85	2.38
	21.7	13.84					32118				
	23.2	8.63					17006				

*A clinical observation of the animal under test did not show anything unusual. This is considered to be caused by an operational error in measuring the body weight.

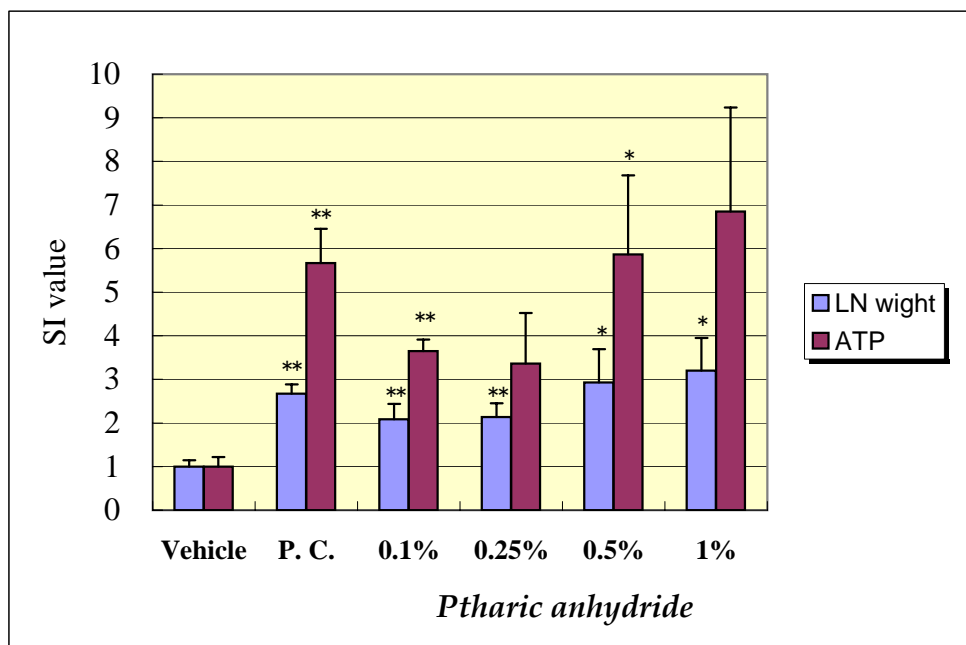


Fig 7. Result of pthalic anhydride using LLNA-DA method.

Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 8 Result of LLNA-DA (Formaldehyde) Vehicle; acetone (ACE), P. C.; HCA 15%/ACE.

Animals: CBA JNCrlj mice Female, 10wk
 Date of start: September 28, 2005
 Date of measurement: October 5, 2005

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	22.5	3.81	3.52	0.66	1.00	0.19	3937	2711	822	1.00	0.30
	23.3	2.58					2374				
	20.6	3.57					2360				
	21.6	4.10					2173				
P. C.	21.6	12.98	11.11	1.85	3.16	0.53	21117	16724	4412	6.17	1.63
	24.9	12.41					19843				
	20.5	9.63					12203				
	23.2	9.41					13734				
Formaldehyde 0.1%	22.4	4.22	3.93	0.38	1.12	0.11	5222	3730	1294	1.38	0.48
	20.8	3.50					3045				
	21.2	4.08					2923				
Formaldehyde 0.25%	23.5	4.98	4.94	0.62	1.40	0.18	6167	4731	1647	1.75	0.61
	22.5	4.30					2933				
	23.8	5.53					5093				
Formaldehyde 0.5%	21.7	4.72	5.18	0.53	1.47	0.15	2317	4019	1525	1.48	0.56
	24.7	5.07					4479				
	21.3	5.76					5263				
Formaldehyde 1%	22.8	5.81	6.18	1.92	1.76	0.55	7846	7456	3384	2.75	1.25
	23.5	8.26					10628				
	24.4	4.48					3894				
Formaldehyde 2.5%	20.2	9.99	9.42	0.59	2.68	0.17	17242	13833	3696	5.10	1.36
	21.4	8.81					14355				
	26.4	9.45					9904				

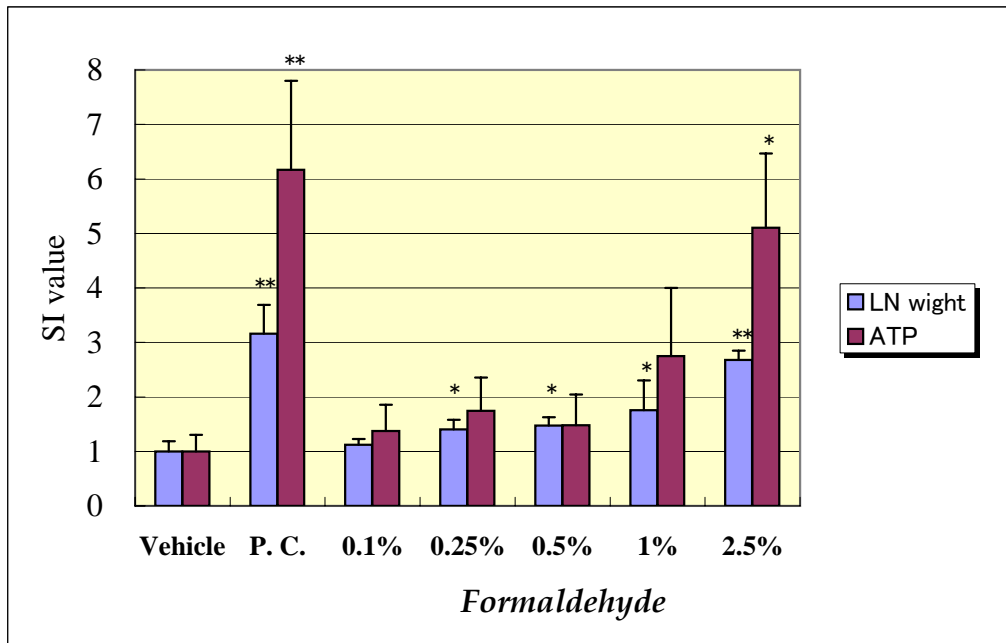


Fig. 8 Result of formaldehyde using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; acetone (ACE), P. C.; HCA 15%/ACE.

Table 9 Result of LLNA-DA (Cinnamic aldehyde) Vehicle; AOO (acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: July 2, 2003

Date of measurement: July 9, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	22.7	4.19	4.55	0.33	1.00	0.07	4927	4411	753	1.00	0.17
	23.2	4.63					3547				
	24.9	4.83					4758				
P. C.	24.4	10.89	9.21	1.46	2.02	0.32	17020	14388	2471	3.26	0.56
	21.8	8.24					14029				
	23.7	8.50					12117				
Cinnamic aldehyde 1%	22.3	5.98	7.34	1.28	1.61	0.28	6780	9199	3547	2.09	0.80
	21.7	8.52					13271				
	23.8	7.53					7545				
Cinnamic aldehyde 2.5%	23.6	9.63	8.86	0.92	1.95	0.20	13624	11743	2487	2.66	0.56
	21.5	7.84					8924				
	22.2	9.11					12681				
Cinnamic aldehyde 5%	21.4	12.36	11.86	0.50	2.61	0.11	21975	19502	2344	4.42	0.53
	24.9	11.36					17313				
	21.5	11.87					19218				
Cinnamic aldehyde 15%	24.3	15.29	16.74	2.38	3.68	0.52	20037	20848	3245	4.73	0.74
	24.2	15.44					18085				
	23.4	19.49					24421				

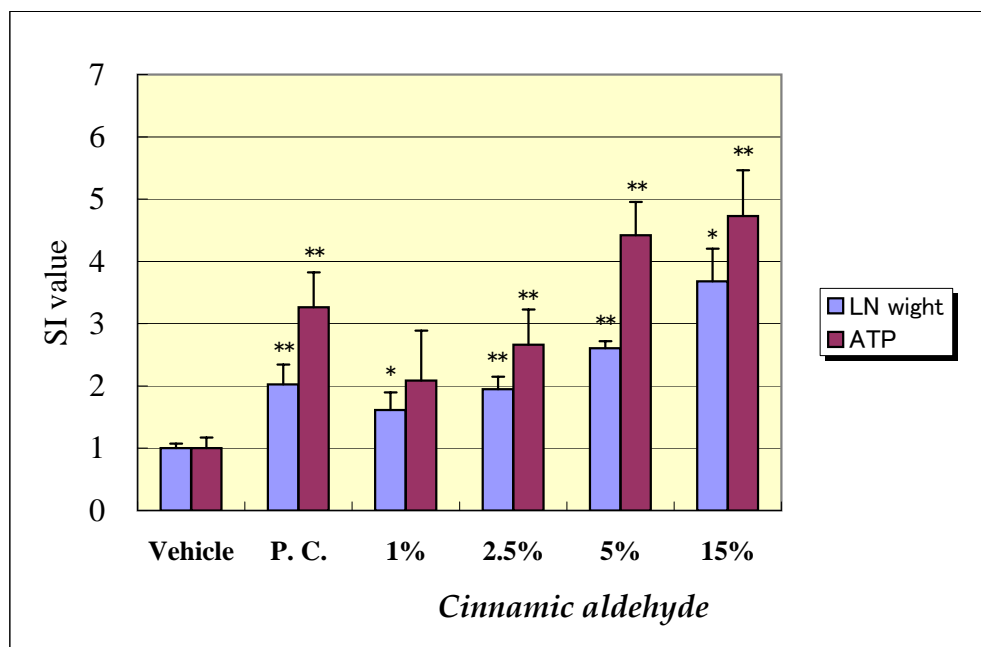


Fig. 9 Result of cinnamic aldehyde using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 10 Result of LLNA-DA (Isoeugenol) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 9wk

Date of start: October 8, 2003

Date of measurement: October 15, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	23.8	4.18	4.19	0.01	1.00	0.00	1460	3528	1881	1.00	0.53
	24.0	4.20					5137				
	24.2	4.19					3988				
P. C.	24.8	9.52	10.61	1.25	2.53	0.30	22813	24980	5267	7.08	1.49
	22.8	10.34					21142				
	23.6	11.97					30985				
Isoeugenol 2.5%	22.2	7.86	6.73	1.07	1.61	0.26	15638	10982	4057	3.11	1.15
	22.9	5.73					9113				
	23.0	6.59					8197				
Isoeugenol 5%	23.2	8.61	9.48	1.29	2.26	0.31	15773	15473	4411	4.39	1.25
	23.5	10.96					19726				
	24.4	8.88					10920				
Isoeugenol 10%	25.5	15.92	14.59	1.42	3.48	0.34	24776	23869	805	6.77	0.23
	24.7	13.10					23236				
	23.5	14.74					23595				
Isoeugenol 25%	25.1	22.08	21.72	0.59	5.18	0.14	40328	43598	5920	12.36	1.68
	24.0	22.03					50432				
	22.9	21.04					40035				
Isoeugenol 50%	24.1	19.43	20.31	2.63	4.85	0.63	43389	37359	7894	10.59	2.24
	22.2	18.24					28424				
	23.6	23.27					40263				

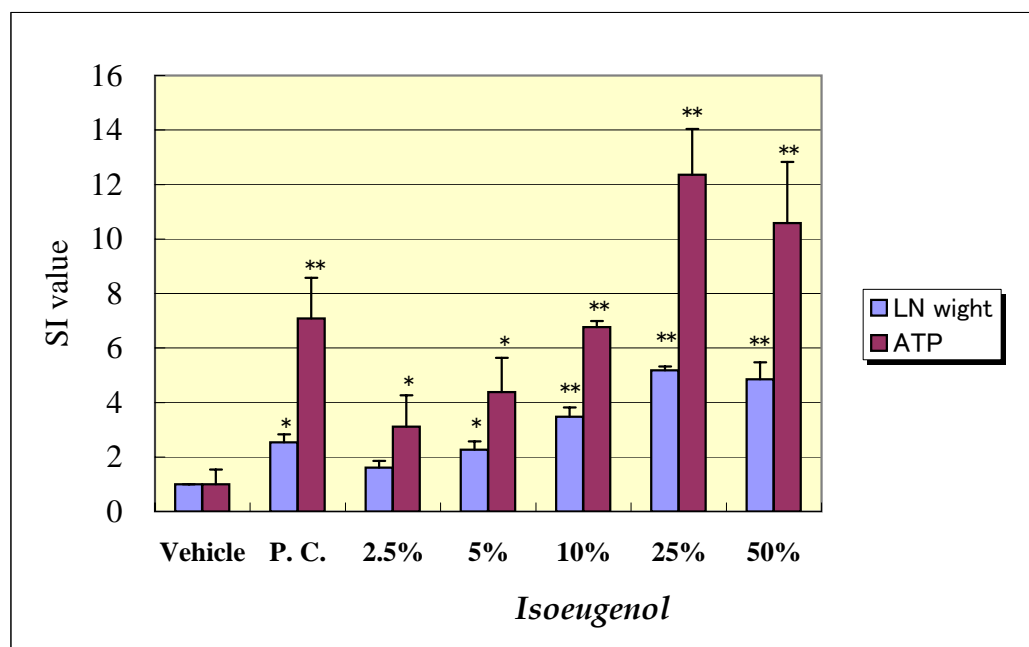


Fig. 10. Result of isoeugenol using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 11 Result of LLNA-DA (Cobalt(II) chloride, CoCl_2) Vehicle; DMSO, P. C. 1; Eugenol 10%/DMSO, AOO; acetone/olive oil (4:1, v/v), P. C. 2; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk
 Date of start: August 27, 2003
 Date of measurement: September 3, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	20.9	4.38	5.98	1.11	1.00	0.19	4770	6674	1527	1.00	0.23
	23.9	6.09					6914				
	27.4	6.60					8487				
	23.3	6.84					6527				
P. C. 1	24.4	9.00	9.35	1.57	1.56	0.26	10887	12399	2877	1.86	0.43
	24.6	11.24					16484				
	21.9	7.46					9982				
	25.3	9.68					12245				
CoCl_2 1%	25.2	10.64	10.11	0.47	1.69	0.08	17709	14270	2981	2.14	0.45
	26.0	9.90					12673				
	26.1	9.78					12428				
CoCl_2 2.5%	23.7	11.07	11.99	0.81	2.01	0.14	17680	18117	606	2.71	0.09
	23.9	12.30					17863				
	23.5	12.59					18809				
CoCl_2 5%	26.1	16.58	15.61	3.18	2.61	0.53	28248	24298	6013	3.64	0.90
	24.6	18.19					27268				
	23.9	12.06					17378				
AOO	22.7	3.80	3.83	0.17	1.00	0.04	3529	3014	436	1.00	0.14
	24.3	4.04					3106				
	21.7	3.85					2949				
	24.4	3.63					2473				
P. C. 2	25.3	11.21	9.59	1.35	2.50	0.35	20105	15535	3114	5.15	1.03
	25.7	8.46					14663				
	24.6	10.18					14233				
	25.3	8.50					13137				

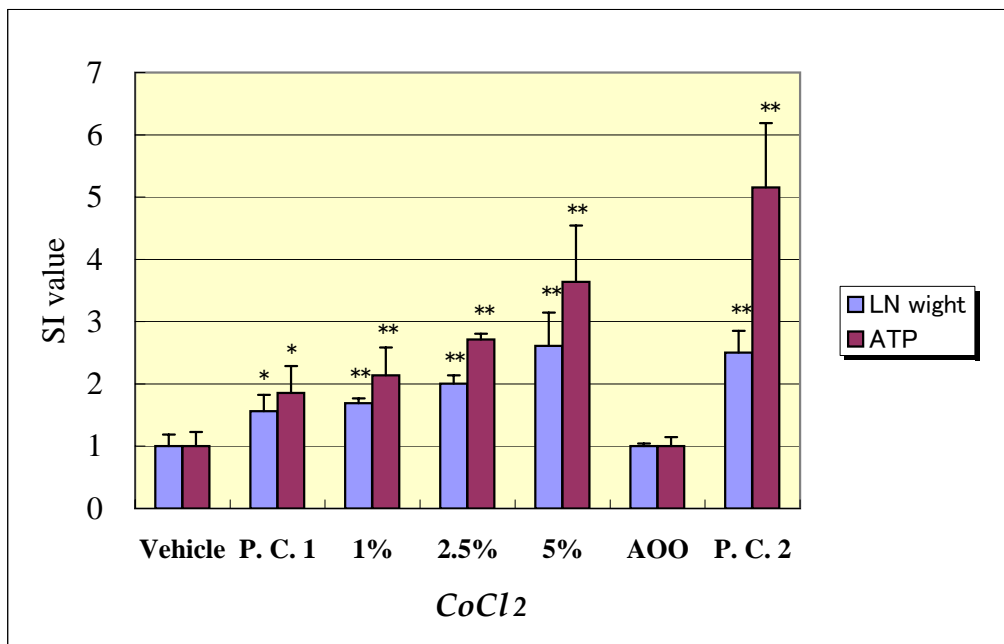


Fig. 11. Result of cobalt(II) chloride (CoCl_2) using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; DMSO, P. C. 1; Eugenol 10%/DMSO, AOO; acetone/olive oil (4:1, v/v), P. C. 2; Eugenol 10%/AOO.

Table 12 Result of LLNA-DA (Eugenol) Vehicle; AOO(acetone/olive oil (4:1, v/v)).

Animals: CBA JNCrlj mice Female, 9wk

Date of start: July 30, 2003

Date of measurement: August 6, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.8	4.51	4.37	0.23	1.00	0.05	3759	3871	344	1.00	0.09
	20.8	4.63					3995				
	21.3	4.18					3461				
	22.5	4.17					4269				
Eugenol 5%	21.7	7.19	7.32	0.31	1.67	0.07	12594	12533	2714	3.24	0.70
	21.5	7.68					15216				
	23.1	7.10					9790				
Eugenol 10%	22.3	9.07	10.19	1.56	2.33	0.36	16624	18535	3636	4.79	0.94
	25.2	12.35					23785				
	26.4	9.01					15667				
	21.3	10.31					18066				
Eugenol 25%	21.8	11.86	12.79	0.89	2.92	0.20	26107	27372	1694	7.07	0.44
	22.6	12.86					26713				
	21.9	13.64					29297				

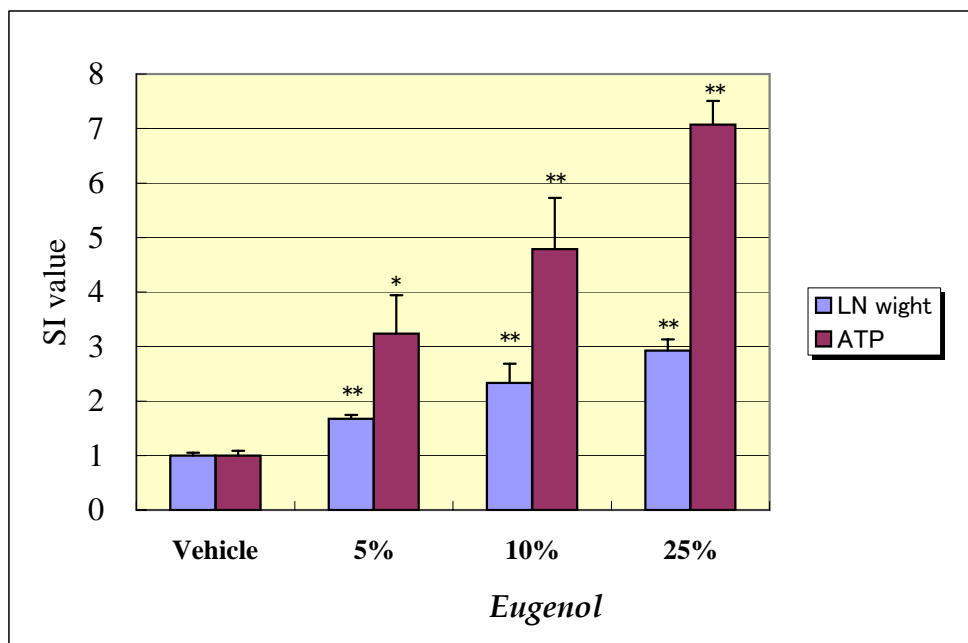


Fig. 12 Result of eugenol using LLNA-DA method.
Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO.

Table 13 Result of LLNA-DA (Resorcinol) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrJ mice Female, 11 wk

Date of start: September 28, 2005

Date of measurement: October 5, 2005

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	22.9	4.87	4.71	0.53	1.00	0.11	5263	4907	656	1.00	0.13
	22.5	4.89					4970				
	25.2	5.14					5431				
	22.2	3.94					3965				
P. C.	21.4	11.53	10.79	2.01	2.29	0.43	25796	22011	5413	4.49	1.10
	22.0	10.01					24279				
	24.7	8.48					13979				
	23.0	13.15					23991				
Resorcinol 5%	21.5	6.21	6.81	0.54	1.45	0.11	12461	12099	359	2.47	0.07
	22.4	7.24					11743				
	22.1	6.98					12095				
Resorcinol 10%	21.4	11.57	10.47	1.87	2.22	0.40	25798	21230	4514	4.33	0.92
	22.3	8.31					16771				
	22.4	11.53					21121				
Resorcinol 25%	21.3	11.12	9.99	1.97	2.12	0.42	20760	17211	6544	3.51	1.33
	20.6	11.14					21215				
	21.4	7.71					9659				

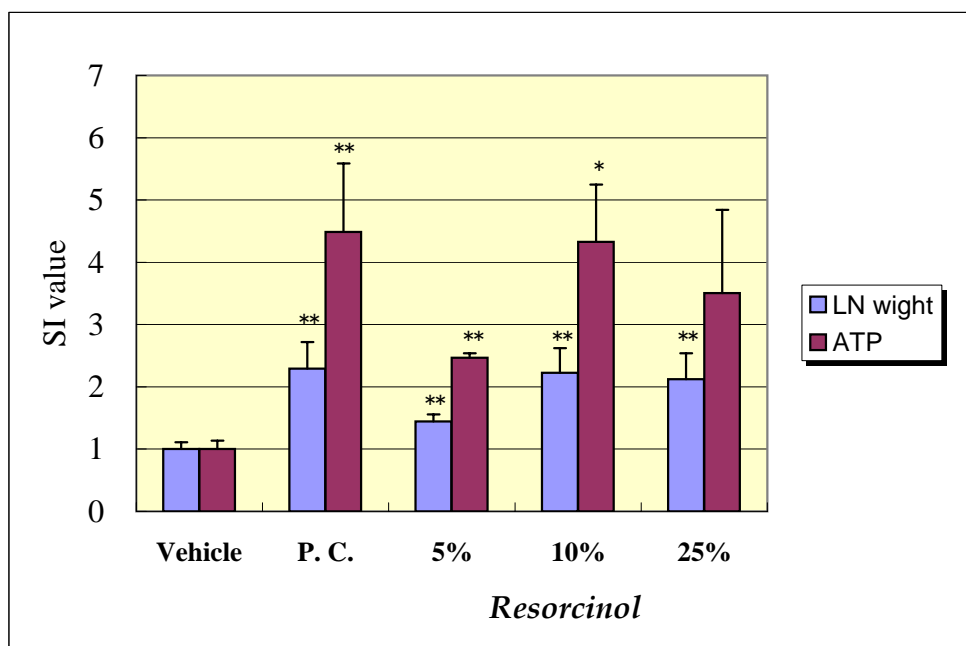


Fig. 13 Result of resorcinol using LLNA-DA method. Data presented as mean \pm S.D., *p < 0.05, **p < 0.01. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 14 Result of LLNA-DA (Benzocaine) Vehicle; AOO (acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: September 3, 2003

Date of measurement: September 10, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.5	3.01	3.39	0.39	1.00	0.12	2660	2580	518	1.00	0.20
	25.6	3.71					2856				
	24.0	3.09					1828				
	25.6	3.74					2975				
P. C.	21.9	10.80	9.29	1.20	2.74	0.35	19298	15859	3223	6.15	1.25
	22.1	9.44					17360				
	22.3	9.04					14953				
	23.6	7.89					11827				
Benzocaine 5%	25.1	6.92	5.94	1.09	1.75	0.32	10495	6766	3722	2.62	1.44
	25.6	4.76					3052				
	24.1	6.14					6751				
Benzocaine 10%	22.6	6.69	7.12	0.78	2.10	0.23	10314	9857	1312	3.82	0.51
	21.3	8.02					10880				
	23.3	6.64					8378				
Benzocaine 25%	24.4	6.41	6.72	0.78	1.98	0.23	10512	12480	6887	4.84	2.67
	24.6	6.14					6793				
	24.7	7.60					20137				

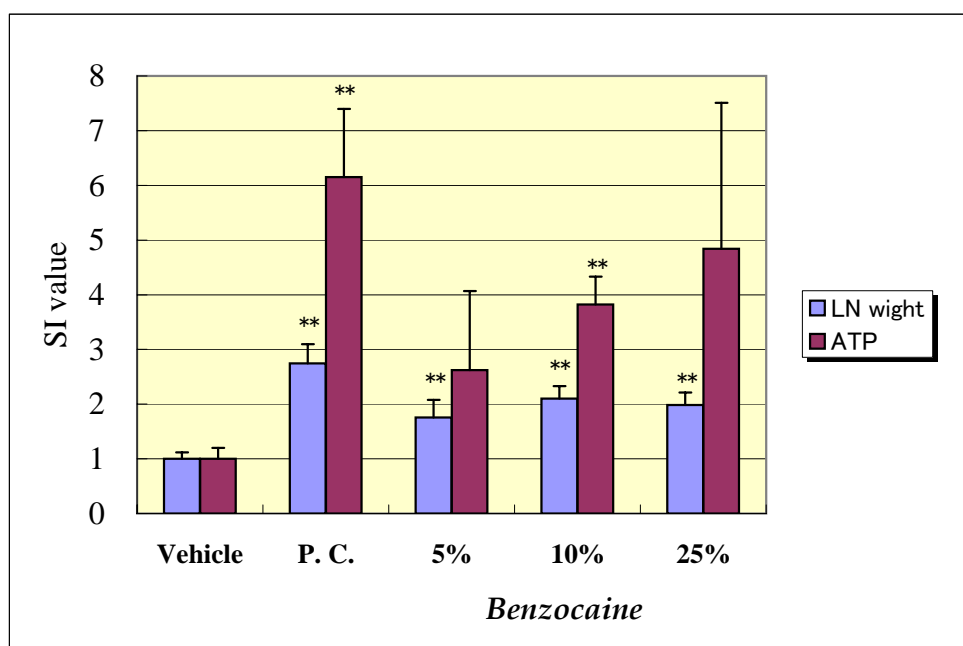


Fig. 14. Result of benzocaine using LLNA-DA method.

Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 15 Result of LLNA-DA (Abietic acid) Vehicle; AOO (acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: August 27, 2003

Date of measurement: September 3, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	22.7	3.80	3.83	0.17	1.00	0.04	3529	3014	436	1.00	0.14
	24.3	4.04					3106				
	21.7	3.85					2949				
	24.4	3.63					2473				
P. C.	25.3	11.21	9.59	1.35	2.50	0.35	20105	15535	3114	5.15	1.03
	25.7	8.46					14663				
	24.6	10.18					14233				
	25.3	8.50					13137				
Abietic acid 5%	23.4	5.19	5.87	0.73	1.53	0.19	4143	6752	2472	2.24	0.82
	19.6	5.79					9059				
	24.1	6.64					7056				
Abietic acid 10%	23.6	7.70	7.55	0.13	1.97	0.03	13190	10701	2421	3.55	0.80
	24.8	7.44					8354				
	24.0	7.52					10561				
Abietic acid 25%	23.7	11.19	11.28	0.24	2.95	0.06	20693	18857	1793	6.26	0.59
	23.3	11.10					17109				
	22.5	11.55					18770				

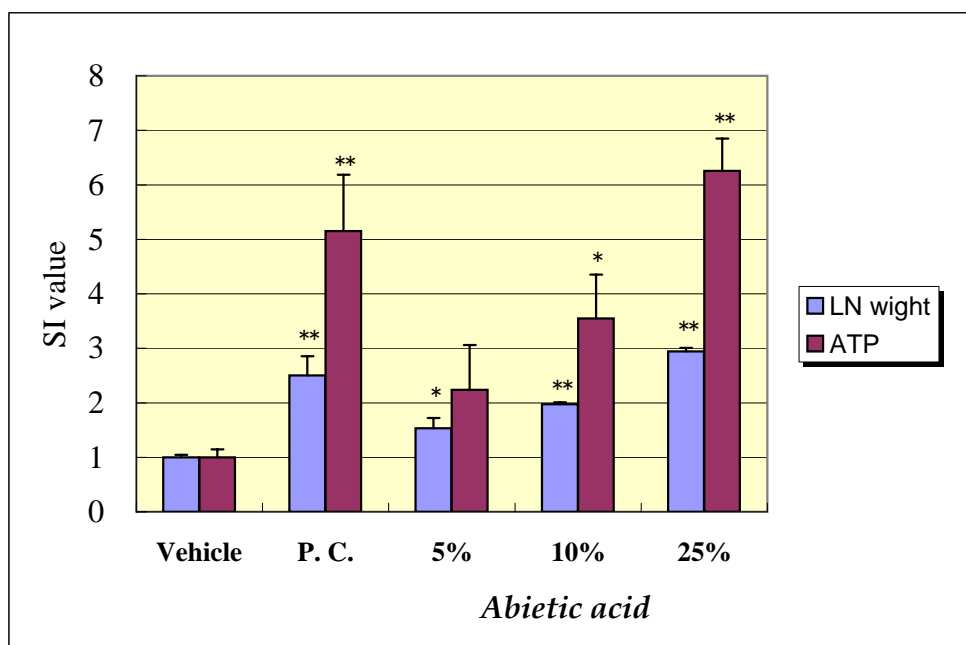


Fig. 15. Result of abietic acid using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 16 Result of LLNA-DA (Hexylcinnamic aldehyde, HCA) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 9wk

Date of start: July 30, 2003

Date of measurement: August 6, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.8	4.51	4.37	0.23	1.00	0.05	3759	3871	344	1.00	0.09
	20.8	4.63					3995				
	21.3	4.18					3461				
	22.5	4.17					4269				
P. C.	22.3	9.07	10.19	1.56	2.33	0.36	16624	18535	3636	4.79	0.94
	25.2	12.35					23785				
	26.4	9.01					15667				
	21.3	10.31					18066				
HCA 5%	21.6	5.62	4.69	0.87	1.07	0.20	7375	5005	2053	1.29	0.53
	21.2	3.90					3858				
	21.0	4.56					3782				
HCA 10%	23.4	8.38	7.94	1.01	1.82	0.23	9217	9981	2384	2.58	0.62
	22.0	8.65					12654				
	21.6	6.78					8072				
HCA 25%	19.8	12.55	12.84	1.17	2.94	0.27	30420	25038	7083	6.47	1.83
	21.9	14.13					27682				
	20.5	11.85					17014				

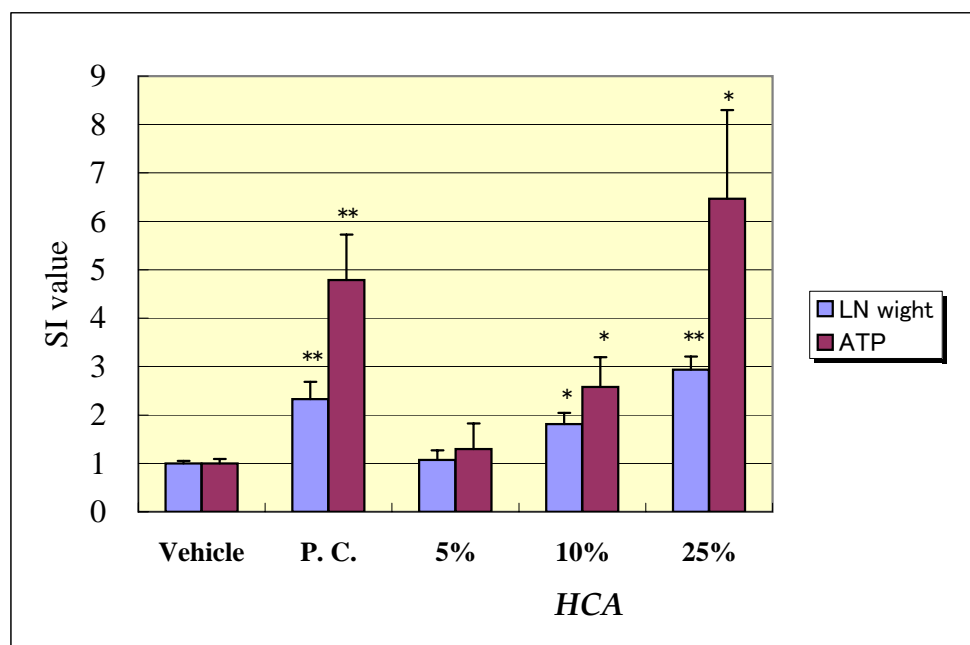


Fig. 16 Result of hexylcinnamic aldehyde (HCA) using LLNA-DA method. Data presented as mean \pm S.D., *p < 0.05, **p < 0.01. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 17 Result of LLNA-DA (Imidazolidinyl urea) Vehicle; DMF, P. C. 1; Eugenol 10%/DMF, AOO; acetone/olive oil (4:1, v/v), P. C. 2; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: September 3, 2003

Date of measurement: September 10, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	23.9	4.28	4.03	0.55	1.00	0.14	4424	3428	905	1.00	0.26
	24.4	3.98					3087				
	26.6	3.29					2348				
	26.0	4.56					3854				
P. C. 1	23.5	4.72	5.07	1.15	1.26	0.29	5738	5813	1842	1.70	0.54
	24.0	5.23					5644				
	26.9	3.77					3688				
	26.2	6.54					8185				
Imidazolidinyl urea 10%	24.0	5.72	5.65	0.85	1.40	0.21	7333	8084	1805	2.36	0.53
	27.0	4.76					6777				
	26.9	6.46					10143				
Imidazolidinyl urea 25%	27.6	7.17	7.41	0.22	1.84	0.05	9854	11848	2027	3.46	0.59
	28.0	7.60					13907				
	28.2	7.47					11783				
Imidazolidinyl urea 50%	26.3	9.00	9.43	0.85	2.34	0.21	14760	16010	1720	4.67	0.50
	23.2	8.88					15299				
	23.1	10.41					17971				
AOO	24.5	3.01	3.39	0.39	1.00	0.12	2660	2580	518	1.00	0.20
	25.6	3.71					2856				
	24.0	3.09					1828				
	25.6	3.74					2975				
P. C. 2	21.9	10.80	9.29	1.20	2.74	0.35	19298	15859	3223	6.15	1.25
	22.1	9.44					17360				
	22.3	9.04					14953				
	23.6	7.89					11827				

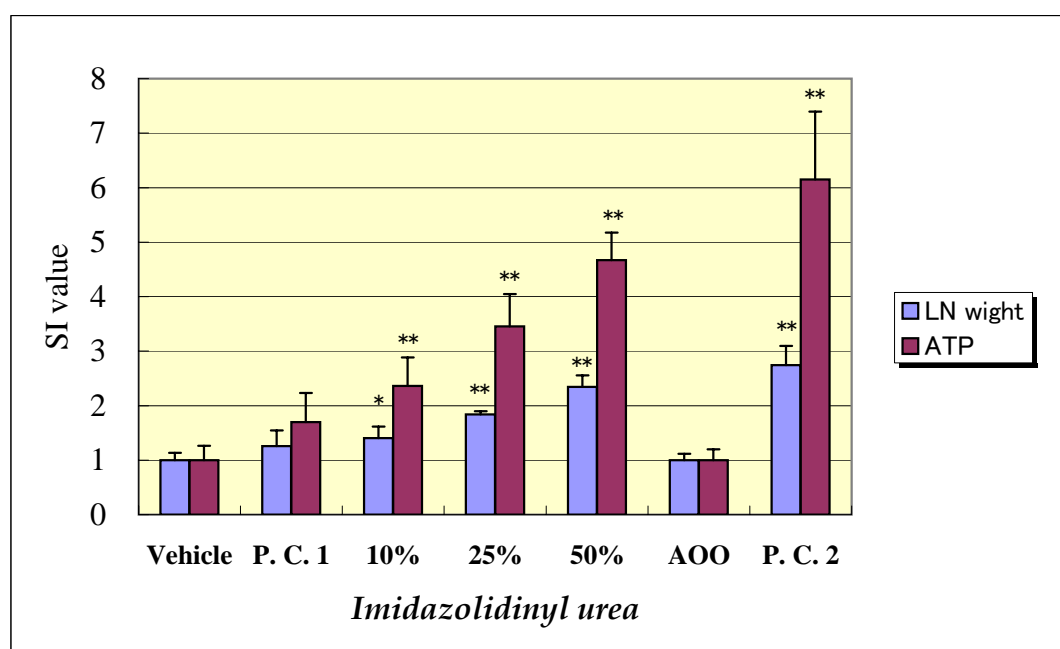


Fig. 17. Result of imidazolidinyl urea using LLNA-DA method. Data presented as mean \pm S.D., *p < 0.05, **p < 0.01. Vehicle; DMF, P. C. 1; Eugenol 10%/DMF, AOO; acetone/olive oil (4:1, v/v), P. C. 2; Eugenol 10%/AOO.

Table 18 Result of LLNA-DA (2-Mercaptobenzothiazol, MBT) Vehicle; DMF, P. C. 1; Eugenol 10%/DMF, AOO; acetone/olive oil (4:1, v/v), P. C. 2; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk
 Date of start: September 3, 2003
 Date of measurement: September 10, 2003

	Body weight (g)	Lymph node wight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	23.9	4.28	4.03	0.55	1.00	0.14	4424	3428	905	1.00	0.26
	24.4	3.98					3087				
	26.6	3.29					2348				
	26.0	4.56					3854				
P. C. 1	23.5	4.72	5.07	1.15	1.26	0.29	5738	5813	1842	1.70	0.54
	24.0	5.23					5644				
	26.9	3.77					3688				
	26.2	6.54					8185				
MBT 10%	25.2	4.77	4.86	0.12	1.21	0.03	7829	6859	1111	2.00	0.32
	23.9	4.81					7102				
	26.3	4.99					5647				
MBT 25%	26.0	5.60	4.66	0.91	1.16	0.23	6978	4601	2283	1.34	0.67
	24.2	3.79					2425				
	23.9	4.60					4401				
MBT 50%	23.6	4.73	4.69	0.06	1.17	0.01	3976	3675	889	1.07	0.26
	24.2	4.72					4375				
	23.2	4.63					2675				
AOO	24.5	3.01	3.39	0.39	1.00	0.12	2660	2580	518	1.00	0.20
	25.6	3.71					2856				
	24.0	3.09					1828				
	25.6	3.74					2975				
P. C. 2	21.9	10.80	9.29	1.20	2.74	0.35	19298	15859	3223	6.15	1.25
	22.1	9.44					17360				
	22.3	9.04					14953				
	23.6	7.89					11827				

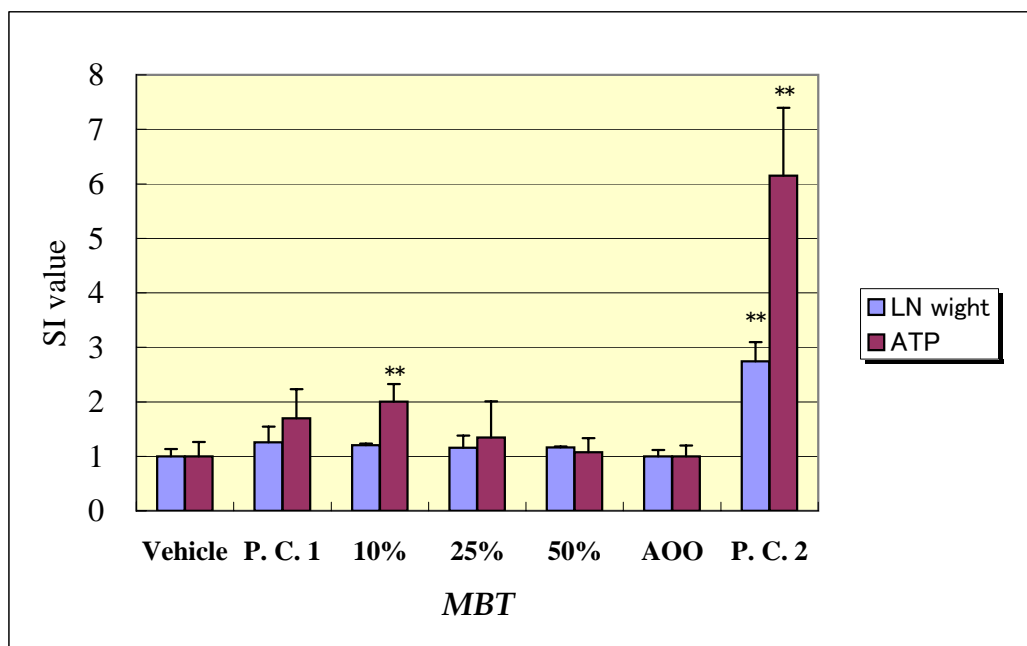


Fig. 18. Result of 2-mercaptobenzothiazol (MBT) using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; DMF, P. C. 1; Eugenol 10%/DMF, AOO; acetone/olive oil (4:1, v/v), P. C. 2; Eugenol 10%/AOO.

Table 19 Result of LLNA-DA (Citral) Vehicle; AOO (acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk
 Date of start: July 2, 2003
 Date of measurement: July 9, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	22.7	4.19	4.55	0.33	1.00	0.07	4927	4411	753	1.00	0.17
	23.2	4.63					3547				
	24.9	4.83					4758				
P. C.	24.4	10.89	9.21	1.46	2.02	0.32	17020	14388	2471	3.26	0.56
	21.8	8.24					14029				
	23.7	8.50					12117				
Citral 5%	25.2	7.80	8.19	1.65	1.80	0.36	9191	8706	3680	1.97	0.83
	22.9	10.00					12120				
	25.8	6.78					4808				
Citral 10%	20.8	10.10	9.65	1.28	2.12	0.28	9937	9304	1635	2.11	0.37
	24.1	8.21					7447				
	26.8	10.65					10528				
Citral 15%	23.1	10.32	11.22	1.31	2.47	0.29	12297	12814	1290	2.91	0.29
	22.0	10.62					11863				
	22.7	12.72					14283				
Citral 25%	21.3	10.28	13.29	2.66	2.92	0.59	18200	19426	2781	4.40	0.63
	21.9	14.27					22609				
	24.7	15.33					17469				

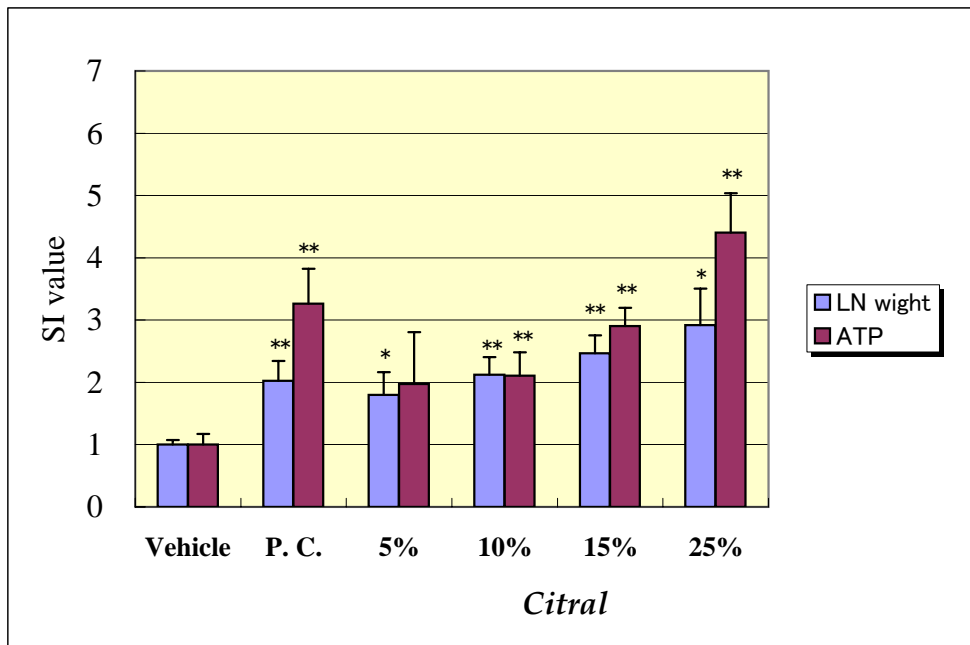


Fig. 19. Result of citral using LLNA-DA method. Data presented as mean \pm S.D., *p < 0.05, **p < 0.01. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 20 Result of LLNA-DA (Hydroxycitronellal) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: February 2, 2005

Date of measurement: February 9, 2005

	Body weight (g)	Lymph node wight(mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.4	4.21	3.63	0.63	1.00	0.17	1727	2151	377	1.00	0.18
	24.9	2.76					2122				
	22.6	3.92					2111				
	22.0	3.64					2645				
P. C.	24.2	9.36	9.31	0.40	2.56	0.11	14885	13679	1965	6.36	0.91
	26.2	9.37					15575				
	23.6	9.75					13056				
	26.4	8.77					11199				
Hydroxycitronellal 10%	23.4	5.71	6.09	0.53	1.68	0.15	5201	4862	667	2.26	0.31
	21.5	5.86					4094				
	23.4	6.69					5293				
Hydroxycitronellal 25%	28.5	9.77	10.51	0.83	2.89	0.23	9519	11246	2085	5.23	0.97
	25.9	11.41					13562				
	26.9	10.34					10656				
Hydroxycitronellal 50%	21.2	10.95	11.26	0.32	3.10	0.09	14400	12234	3055	5.69	1.42
	21.5	11.58					8741				
	21.8	11.24					13563				

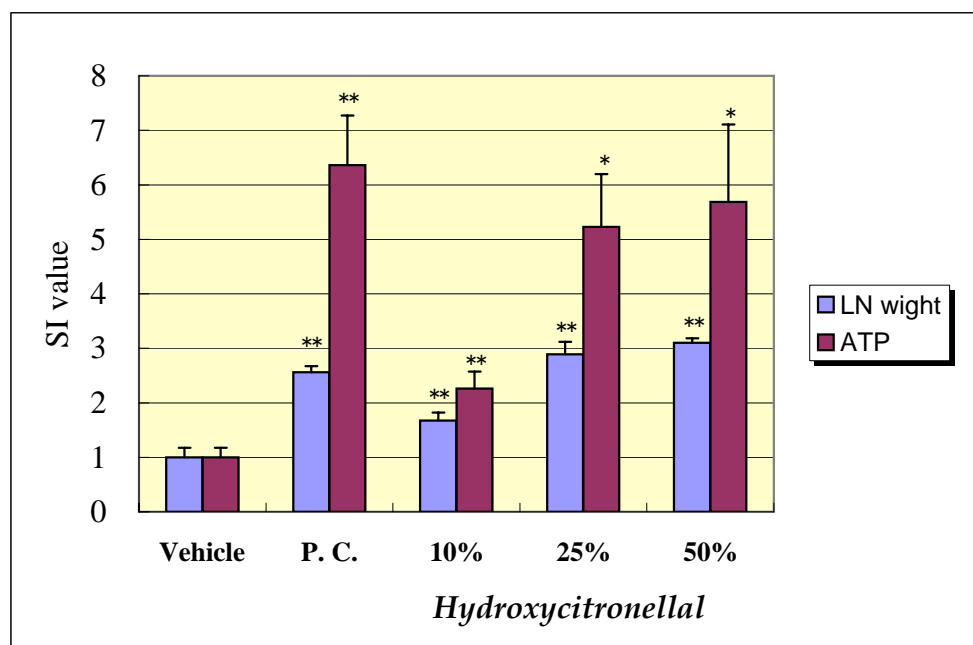


Fig. 20. Result of hydroxycitronellal using LLNA-DA method. Data presented as mean \pm S.D., *p < 0.05, **p < 0.01. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 21 Result of LLNA-DA (Sodium lauryl sulfate, SLS) Vehicle; DMF, P. C.; Cinnamic aldehyde 5%/DMF,

Animals: CBA JNCrlj mice Female, 10wk

Date of start: February 3, 2004

Date of measurement: February 10, 2004

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	22.1	3.72	3.63	0.59	1.00	0.16	2926	2668	1020	1.00	0.38
	22.3	2.78					1674				
	20.3	4.13					3984				
	22.9	3.87					2091				
P. C. 1	20.7	11.22	9.36	1.43	2.58	0.40	17595	13136	3116	4.92	1.17
	20.8	8.23					12322				
	21.5	8.23					10331				
	21.9	9.74					12297				
SLS 1%	21.6	4.45	3.98	0.70	1.10	0.19	3870	3515	536	1.32	0.20
	21.7	3.18					2899				
	22.7	4.32					3777				
SLS 2.5%	22.6	5.40	5.17	0.74	1.43	0.20	7965	6535	1603	2.45	0.60
	19.6	4.34					4802				
	23.9	5.76					6838				
SLS 5%	20.6	4.22	6.13	1.65	1.69	0.46	2945	6006	2677	2.25	1.00
	21.1	7.00					7161				
	20.3	7.16					7913				
SLS 10%	23.5	7.46	6.73	0.63	1.86	0.17	10337	9050	1889	3.39	0.71
	21.3	6.44					6881				
	23.4	6.30					9932				

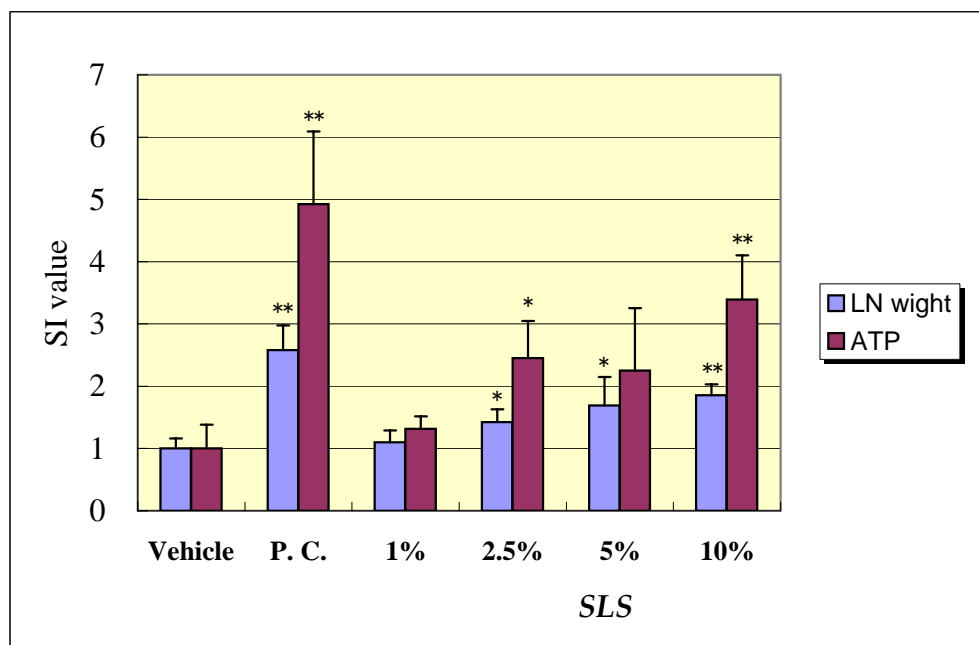


Fig. 21. Result of sodium lauryl sulfate (SLS) using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; DMF, P. C.; Cinnamic aldehyde 5%/DMF,

Table 22 Result of LLNA-DA (Nickel (II) sulfate hexahydrate, NiSO₄) Vehicle; DMSO, P. C. 1; Eugenol 10%/DMSO, AOO; acetone/olive oil (4:1, v/v), P. C. 2; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk
 Date of start: August 27, 2003
 Date of measurement: September 3, 2003

	Body weight (g)	Lymph node wight(mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	20.9	4.38	5.98	1.11	1.00	0.19	4770	6674	1527	1.00	0.23
	23.9	6.09					6914				
	27.4	6.60					8487				
	23.3	6.84					6527				
P. C. 1	24.4	9.00	9.35	1.57	1.56	0.26	10887	12399	2877	1.86	0.43
	24.6	11.24					16484				
	21.9	7.46					9982				
	25.3	9.68					12245				
NiSO ₄ 1%	23.6	6.28	6.71	1.37	1.12	0.23	7672	9098	1743	1.36	0.26
	25.3	8.24					11041				
	24.5	5.61					8581				
NiSO ₄ 2.5%	24.6	7.97	7.75	0.38	1.30	0.06	10829	14496	6269	2.17	0.94
	22.0	7.32					10925				
	20.3	7.97					21735				
NiSO ₄ 5%	22.0	7.45	8.68	1.26	1.45	0.21	15969	12346	3326	1.85	0.50
	24.0	8.62					9433				
	23.6	9.97					11636				
AOO	22.7	3.80	3.83	0.17	1.00	0.04	3529	3014	436	1.00	0.14
	24.3	4.04					3106				
	21.7	3.85					2949				
	24.4	3.63					2473				
P. C. 2	25.3	11.21	9.59	1.35	2.50	0.35	20105	15535	3114	5.15	1.03
	25.7	8.46					14663				
	24.6	10.18					14233				
	25.3	8.50					13137				

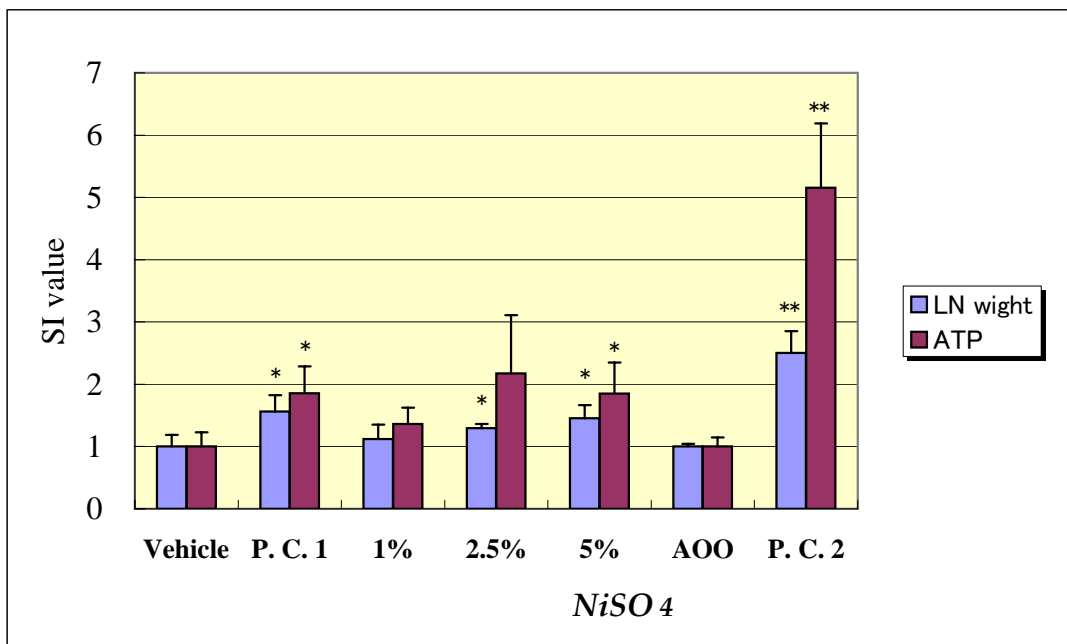


Fig. 22. Result of nickel (II) sulfate hexahydrate (NiSO₄) using LLNA-DA method. Data presented as mean ± S.D., *p < 0.05, **p < 0.01. Vehicle; DMSO, P. C. 1; Eugenol 10%/DMSO, AOO; acetone/olive oil (4:1, v/v), P. C. 2; Eugenol 10%/AOO.

Table 23 Result of LLNA-DA (Benzalkonium chloride) Vehicle; AOO (acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: January 21, 2004

Date of measurement: January 28, 2004

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	21.6	3.36	3.41	0.24	1.00	0.07	863*	1733	93	1.00	0.05
	21.0	3.32					1815				
	22.1	3.75					1752				
	20.8	3.20					1631				
P. C.	20.4	9.21	8.06	0.84	2.37	0.25	13707	9446	3327	5.45	1.92
	24.0	7.26					6746				
	20.6	8.09					10475				
	21.5	7.69					6855				
Benzalkonium chloride 0.5%	21.7	4.80	5.37	0.53	1.58	0.16	3027	4330	1382	2.50	0.80
	22.1	5.86					5780				
	22.3	5.45					4183				
Benzalkonium chloride 1%	22.3	7.96	7.97	0.94	2.34	0.27	9672	9449	1542	5.45	0.89
	22.1	7.04					7809				
	23.0	8.91					10868				
Benzalkonium chloride 2.5%	21.4	8.03	8.76	0.83	2.57	0.24	10292	10080	1913	5.82	1.10
	20.8	9.66					11879				
	20.6	8.58					8070				

*Due to an inadequate setting for this first measurement, it took at the least 15 more minutes before conducting measurement after the excision of the lymph nodes than what it would take under the standard procedure. The ATP content is considered to have been reduced due to this prolonged interval time. The average shown in the table was calculated with the other three values.

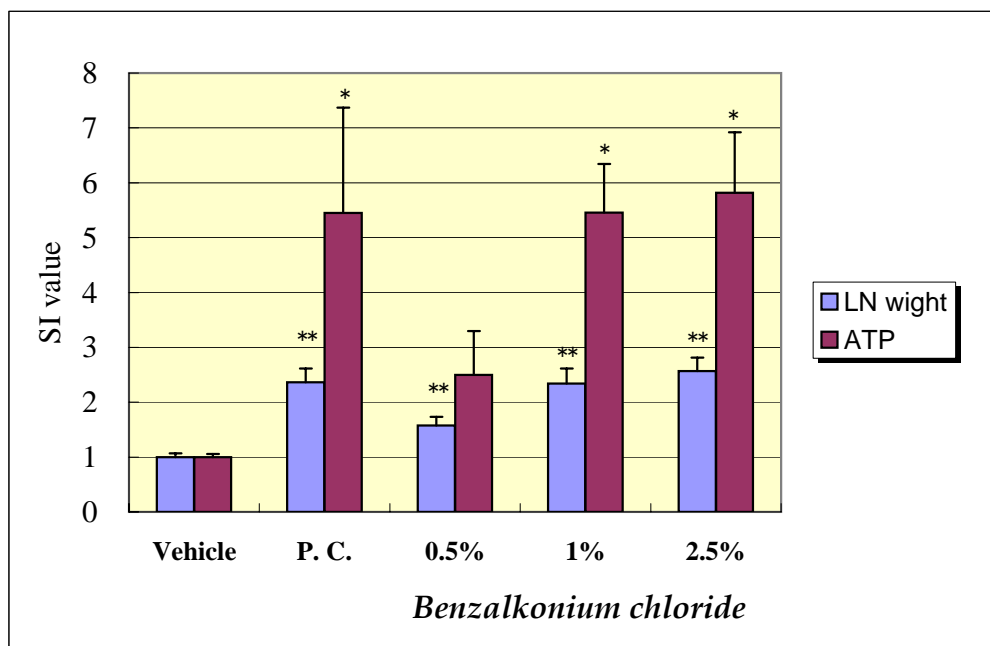


Fig. 23. Result of benzalkonium chloride using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 24 Result of LLNA-DA (Propylparaben) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 9wk

Date of start: July 30, 2003

Date of measurement: August 6, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.8	4.51	4.37	0.23	1.00	0.05	3759	3871	344	1.00	0.09
	20.8	4.63					3995				
	21.3	4.18					3461				
	22.5	4.17					4269				
P. C.	22.3	9.07	10.19	1.56	2.33	0.36	16624	18535	3636	4.79	0.94
	25.2	12.35					23785				
	26.4	9.01					15667				
	21.3	10.31					18066				
Propylparaben 5%	22.0	4.30	4.25	0.46	0.97	0.11	5058	4288	1095	1.11	0.28
	22.5	4.69					4773				
	22.1	3.77					3034				
Propylparaben 10%	25.2	5.37	4.51	0.76	1.03	0.17	5539	4390	1000	1.13	0.26
	23.8	3.93					3919				
	23.3	4.22					3713				
Propylparaben 25%	25.7	4.66	4.19	0.61	0.96	0.14	6385	4959	1995	1.28	0.52
	21.8	4.42					5813				
	21.5	3.50					2679				

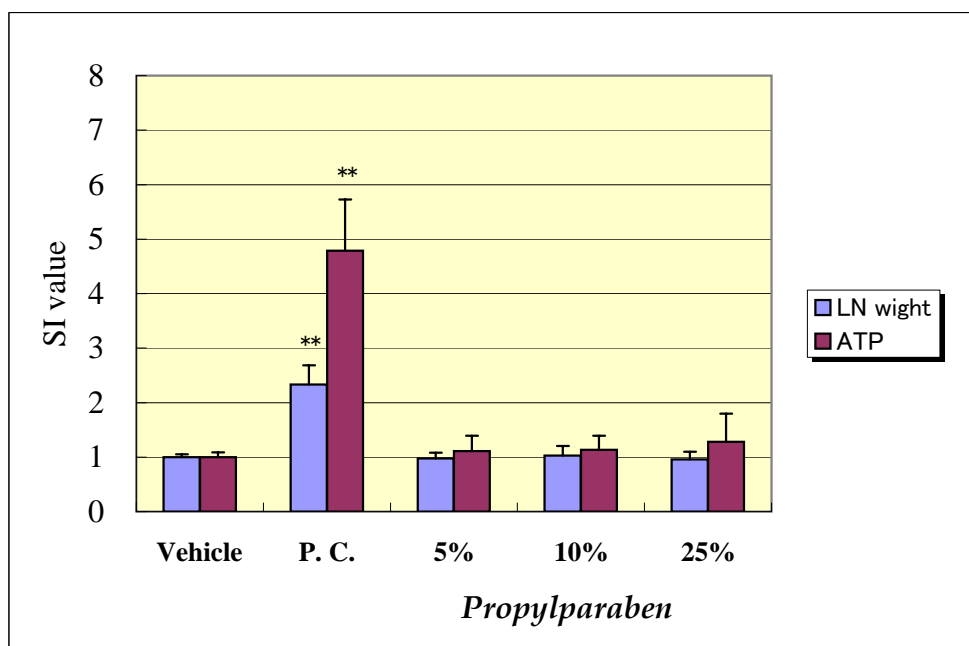


Fig. 24 Result of propylparaben using LLNA-DA method.

Data presented as mean \pm S.D., *p < 0.05, **p < 0.01. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 25 Result of LLNA-DA (Diethylphthalate) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: February 2, 2005

Date of measurement: February 9, 2005

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.4	4.21	3.63	0.63	1.00	0.17	1727	2151	377	1.00	0.18
	24.9	2.76					2122				
	22.6	3.92					2111				
	22.0	3.64					2645				
P. C.	24.2	9.36	9.31	0.40	2.56	0.11	14885	13679	1965	6.36	0.91
	26.2	9.37					15575				
	23.6	9.75					13056				
	26.4	8.77					11199				
Diethylphthalate 25%	23.9	3.63	3.97	0.69	1.09	0.19	1543	2336	709	1.09	0.33
	24.8	4.77					2561				
	23.1	3.52					2906				
Diethylphthalate 50%	20.9	4.21	3.80	0.54	1.05	0.15	1781	1876	559	0.87	0.26
	21.9	3.19					1371				
	21.7	4.01					2477				
Diethylphthalate 100%	23.7	3.63	3.79	0.68	1.04	0.19	1808	1745	429	0.81	0.20
	21.6	3.20					1288				
	24.8	4.53					2139				

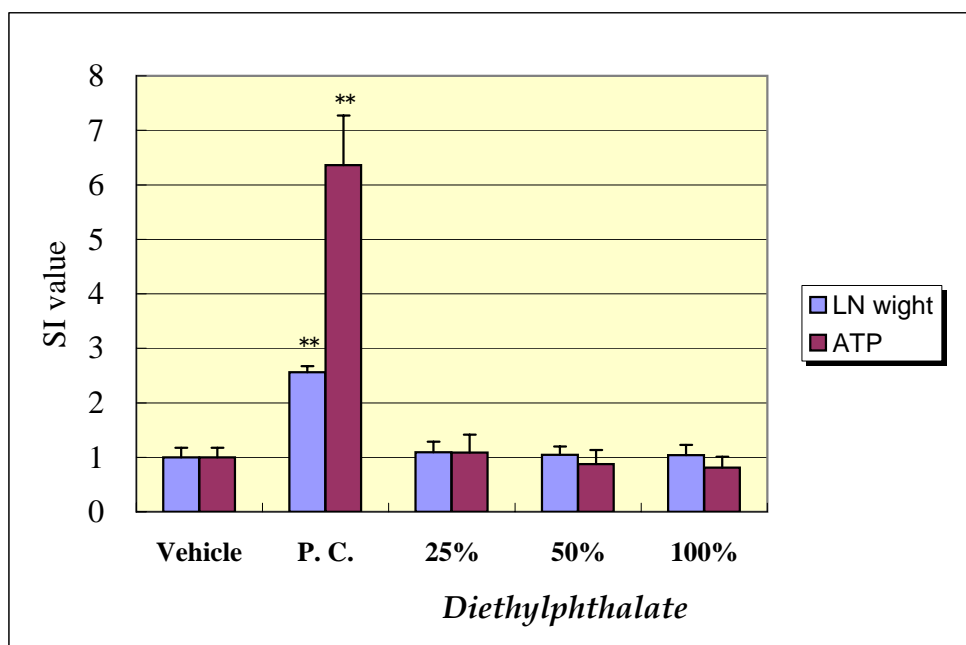


Fig. 25. Result of diethylphthalate using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 26 Result of LLNA-DA (1-Bromobutane) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: February 2, 2005

Date of measurement: February 9, 2005

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.4	4.21	3.63	0.63	1.00	0.17	1727	2151	377	1.00	0.18
	24.9	2.76					2122				
	22.6	3.92					2111				
	22.0	3.64					2645				
P. C.	24.2	9.36	9.31	0.40	2.56	0.11	14885	13679	1965	6.36	0.91
	26.2	9.37					15575				
	23.6	9.75					13056				
	26.4	8.77					11199				
1-Bromobutane 5%	23.0	4.26	4.28	0.46	1.18	0.13	2701	3154	973	1.47	0.45
	22.5	3.84					2491				
	22.8	4.75					4272				
1-Bromobutane 10%	23.3	3.38	3.95	0.59	1.09	0.16	1810	1606	650	0.75	0.30
	22.5	3.92					2130				
	21.9	4.56					878				
1-Bromobutane 25%	21.9	3.85	5.05	1.04	1.39	0.29	3483	3539	654	1.65	0.30
	20.6	5.62					2916				
	27.1	5.69					4220				

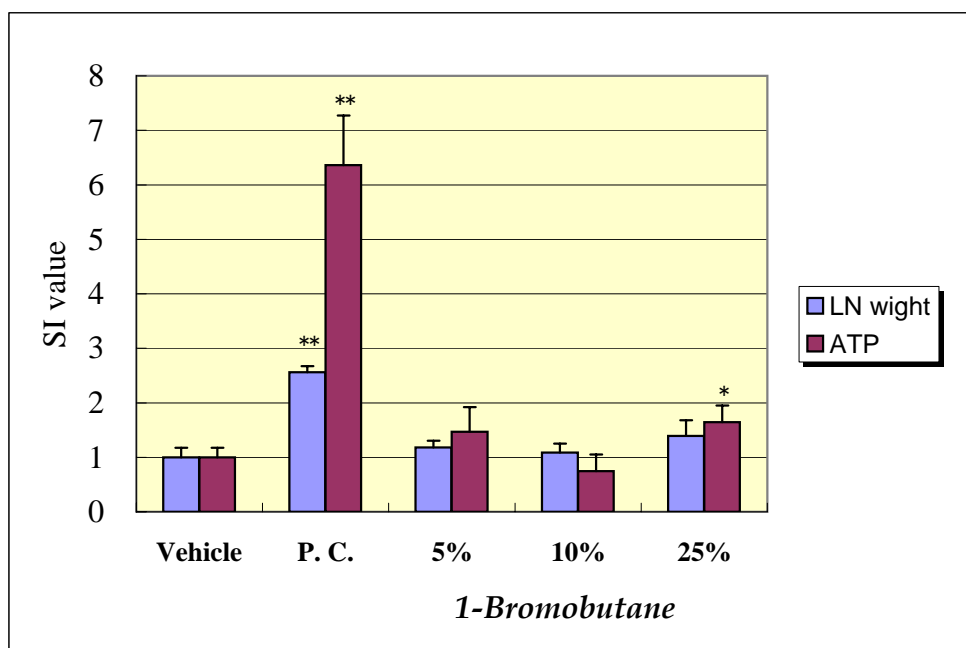


Fig. 26 Result of 1-bromobutane using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 27 Result of LLNA-DA (Methyl salicylate) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; Eugenol 10%/AOO.

Animals: CBA JNCrlj mice Female, 9wk
 Date of start: July 30, 2003
 Date of measurement: August 6, 2003

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.8	4.51	4.37	0.23	1.00	0.05	3759	3871	344	1.00	0.09
	20.8	4.63					3995				
	21.3	4.18					3461				
	22.5	4.17					4269				
P. C.	22.3	9.07	10.19	1.56	2.33	0.36	16624	18535	3636	4.79	0.94
	25.2	12.35					23785				
	26.4	9.01					15667				
	21.3	10.31					18066				
Methyl salicylate 5%	21.2	4.57	4.20	0.49	0.96	0.11	3250	2773	878	0.72	0.23
	23.0	4.38					3310				
	20.1	3.64					1760				
Methyl salicylate 10%	24.1	4.89	4.92	0.49	1.13	0.11	4499	3723	1464	0.96	0.38
	22.8	5.43					4637				
	23.0	4.45					2035				
Methyl salicylate 25%	25.9	4.56	5.14	0.57	1.18	0.13	4542	4661	732	1.20	0.19
	24.6	5.69					5445				
	23.1	5.17					3996				

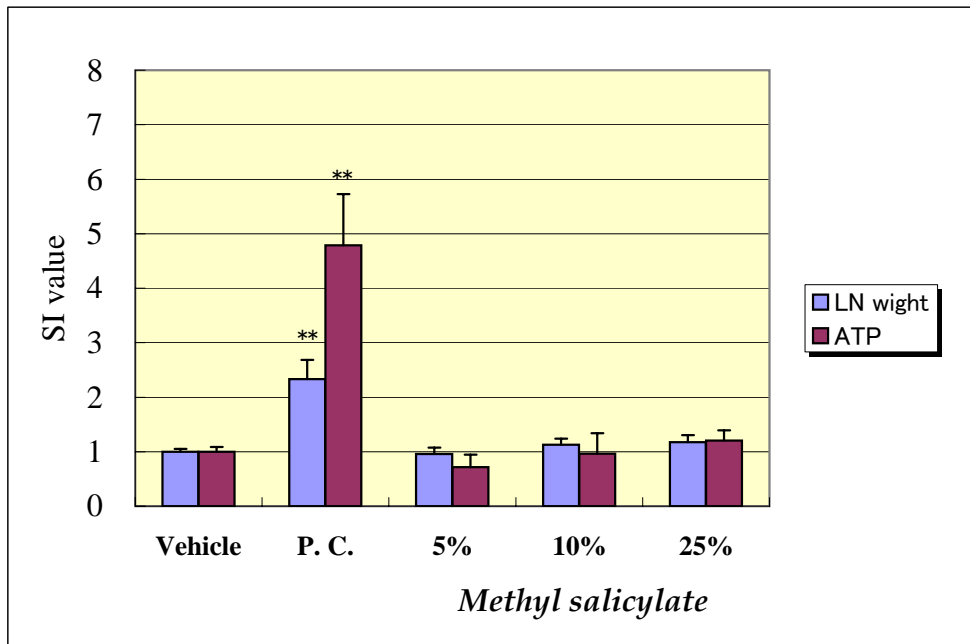


Fig. 27. Result of methyl salicylate using LLNA-DA method. Data presented as mean \pm S.D., *p < 0.05, **p < 0.01. Vehicle; AOO, P. C.; Eugenol 10%/AOO.

Table 28 Result of LLNA-DA (Chlorobenzene) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: February 2, 2005

Date of measurement: February 9, 2005

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	24.4	4.21	3.63	0.63	1.00	0.17	1727	2151	377	1.00	0.18
	24.9	2.76					2122				
	22.6	3.92					2111				
	22.0	3.64					2645				
P. C.	24.2	9.36	9.31	0.40	2.56	0.11	14885	13679	1965	6.36	0.91
	26.2	9.37					15575				
	23.6	9.75					13056				
	26.4	8.77					11199				
Chlorobenzene 5%	24.5	3.96	3.92	0.28	1.08	0.08	1875	1714	563	0.80	0.26
	25.6	4.17					2180				
	22.7	3.62					1088				
Chlorobenzene 10%	23.4	3.94	3.96	0.04	1.09	0.01	2505	2342	444	1.09	0.21
	24.0	4.00					1840				
	22.7	3.93					2682				
Chlorobenzene 25%	20.0	5.37	6.48	1.16	1.78	0.32	2848	5255	2384	2.44	1.11
	21.9	6.39					5302				
	21.7	7.69					7615				

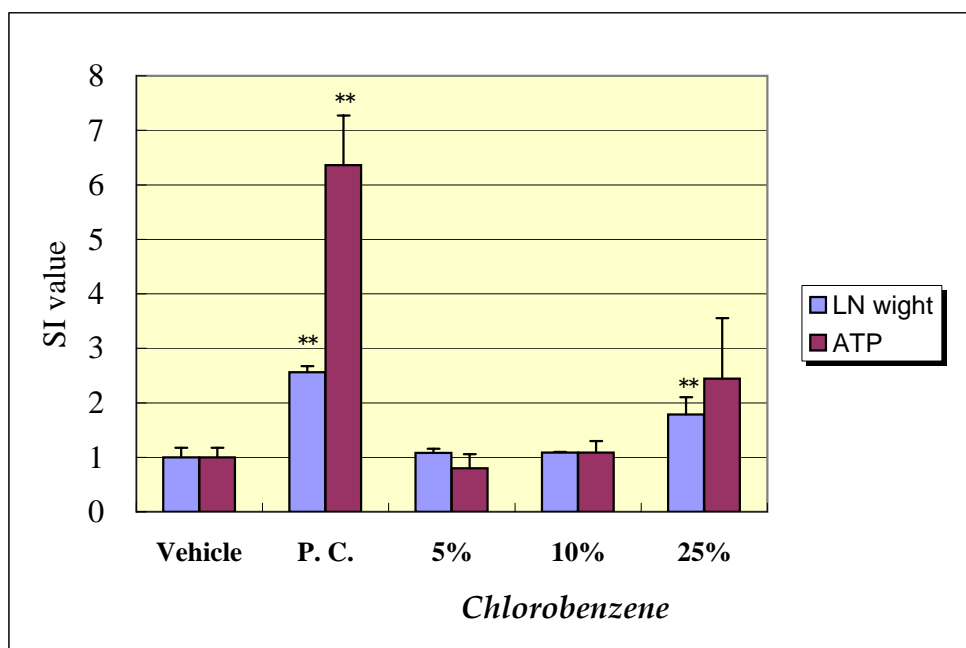


Fig. 28. Result of chlorobenzene using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 29 Result of LLNA-DA (Lactic acid) Vehicle; DMSO, P. C. 1; HCA 15%/DMSO, AOO; acetone/olive oil (4:1, v/v), P. C. 2; HCA 15%/AOO.

Animals: CBA JNCrlj mice Female, 11wk
 Date of start: September 28, 2005
 Date of measurement: October 5, 2005

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	25.3	8.07	6.31	1.26	1.00	0.20	13832	10204	2766	1.00	0.27
	19.8	5.20					9930				
	22.6	5.65					9958				
	21.5	6.33					7097				
P. C. 1	22.7	9.12	9.07	0.56	1.44	0.09	17741	16722	2987	1.64	0.29
	22.1	8.94					18810				
	23.8	9.78					18045				
	23.4	8.42					12293				
Lactic acid 5%	23.7	4.54	5.92	1.25	0.94	0.20	6741	10582	3339	1.04	0.33
	21.3	6.26					12789				
	22.9	6.96					12217				
Lactic acid 10%	21.3	6.23	6.34	0.11	1.00	0.02	11054	10841	1208	1.06	0.12
	23.8	6.44					11929				
	19.6	6.34					9542				
Lactic acid 25%	21.5	4.98	6.05	1.25	0.96	0.20	7025	9832	3531	0.96	0.35
	27.3	7.42					13796				
	23.9	5.76					8677				
Lactic acid 50%	19.8	6.46	6.15	0.31	0.97	0.05	8623	10106	1486	0.99	0.15
	22.2	6.15					10101				
	22.0	5.84					11594				
AOO	22.9	4.87	4.71	0.53	1.00	0.11	5263	4907	656	1.00	0.13
	22.5	4.89					4970				
	25.2	5.14					5431				
	22.2	3.94					3965				
P. C. 2	21.4	11.53	10.79	2.01	2.29	0.43	25796	22011	5413	4.49	1.10
	22.0	10.01					24279				
	24.7	8.48					13979				
	23.0	13.15					23991				

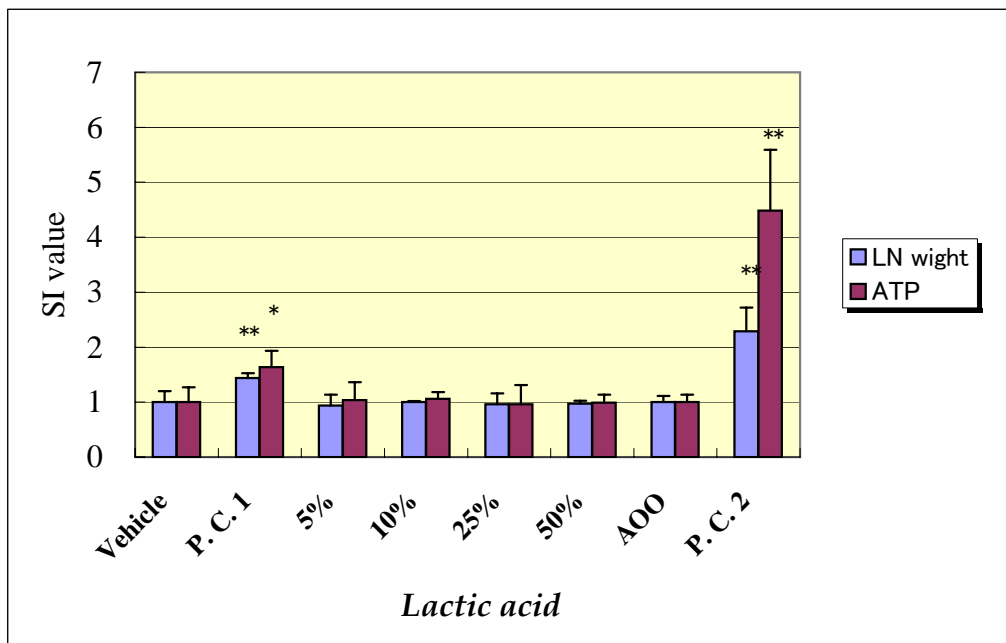


Fig. 29. Result of Lactic acid using LLNA-DA method. Data presented as mean \pm S.D., *p < 0.05, **p < 0.01. Vehicle; DMSO, P. C. 1; HCA 15%/DMSO, AOO; acetone/olive oil (4:1, v/v), P. C. 2; HCA 15%/AOO.

Table 30 Result of LLNA-DA (Hexane) Vehicle; AOO (acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrlj mice Female, 9wk

Date of start: March 17, 2004

Date of measurement: March 24, 2004

	Body weight (g)	Lymph node weight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	22.2	2.92	3.87	0.69	1.00	0.18	2386	3129	849	1.00	0.27
	22.3	4.09					2967				
	22.5	4.56					4347				
	22.1	3.90					2816				
P. C.	22.2	10.27	9.92	1.62	2.56	0.42	9352	11306	3321	3.61	1.06
	22.5	11.66					16201				
	21.9	9.99					10538				
	22.2	7.75					9135				
Hexane 25%	24.2	3.19	3.95	0.83	1.02	0.21	3755	3377	331	1.08	0.11
	22.7	3.84					3240				
	24.6	4.83					3136				
Hexane 50%	21.2	3.78	4.22	0.39	1.09	0.10	3070	2740	298	0.88	0.10
	22.1	4.37					2491				
	23.0	4.51					2658				
Hexane 100%	24.3	6.52	6.18	0.53	1.60	0.14	9027	7226	1631	2.31	0.52
	24.3	6.44					6802				
	23.5	5.57					5850				

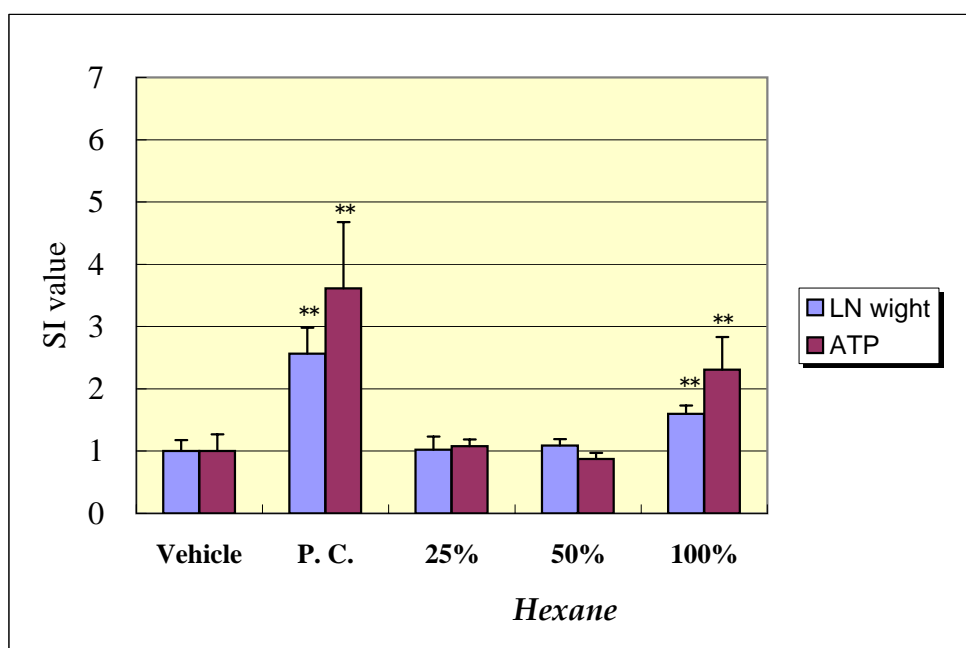


Fig. 30. Result of hexane using LLNA-DA method. Data presented as mean \pm S.D., *p < 0.05, **p < 0.01. Vehicle; AOO, P. C.; HCA 15%/AOO.

Table 31 Result of LLNA-DA (Isopropanol, IPA) Vehicle; AOO(acetone/olive oil (4:1, v/v)), P. C.; HCA 15%/AOO.

Animals: CBA JNCrlj mice Female, 10wk

Date of start: February 18, 2004

Date of measurement: February 25, 2004

	Body weight (g)	Lymph node wight (mg)	Average (mg)	S. D. (mg)	SI value	S. D. (SI)	ATP luminescence (RLU)	Average (RLU)	S. D. (RLU)	SI value	S. D. (SI)
Vehicle	21.6	3.31	3.45	0.37	1.00	0.11	2045	2115	114	1.00	0.05
	24.5	3.71					1990				
	22.6	3.79					2212				
	22.6	2.99					2212				
P. C.	22.1	9.01	8.46	0.75	2.45	0.22	14020	10670	2902	5.05	1.37
	21.6	7.61					9078				
	24.6	8.76					8912				
Isopropanol 10%	22.6	3.11	3.34	0.26	0.97	0.07	1364	2218	774	1.05	0.37
	22.4	3.30					2872				
	22.7	3.62					2417				
Isopropanol 25%	22.8	4.32	3.74	0.51	1.08	0.15	3820	2288	1345	1.08	0.64
	24.1	3.53					1746				
	22.8	3.36					1298				
Isopropanol 50%	27.4	3.69	3.13	1.03	0.91	0.30	2249	1801	959	0.85	0.45
	22.4	1.95					700				
	25.9	3.76					2454				

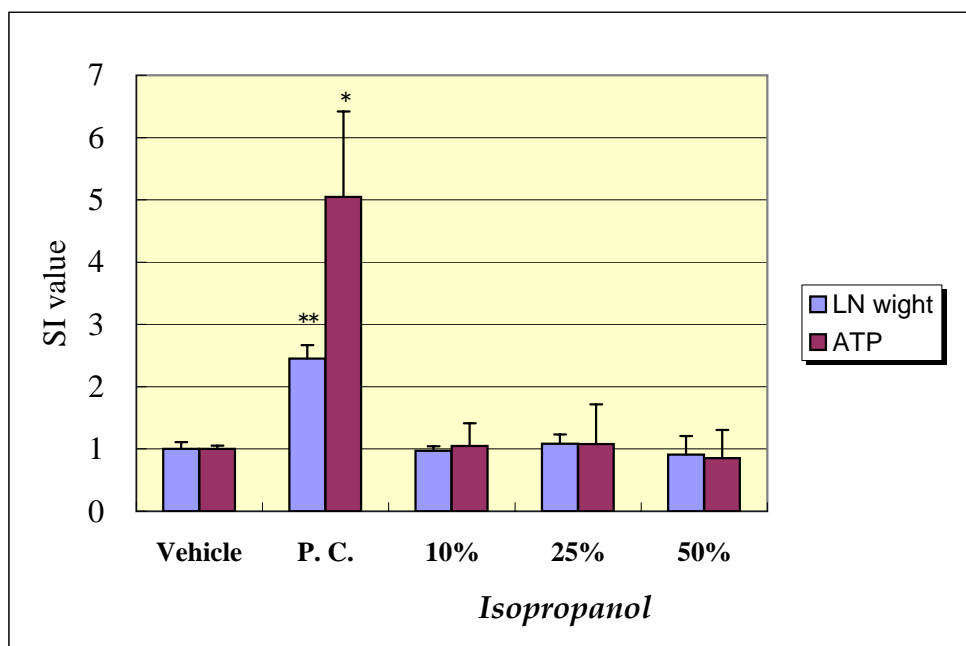


Fig. 31. Result of isopropanol (IPA) using LLNA-DA method. Data presented as mean \pm S.D., * $p < 0.05$, ** $p < 0.01$. Vehicle; AOO, P. C.; HCA 15%/AOO.