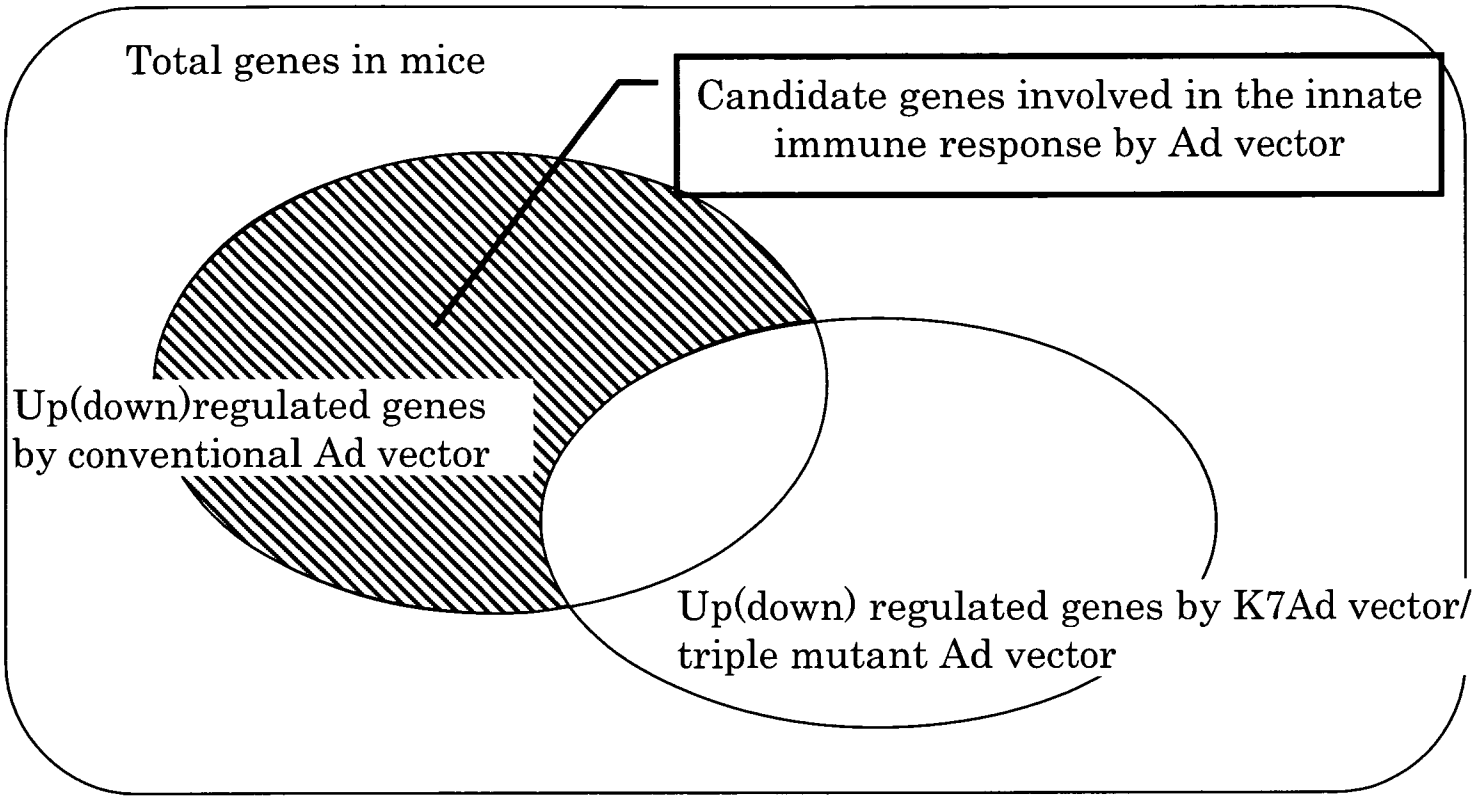


Fig. 7 Selection of the candidate genes involved in the innate immune response induced by the systemic administration of Ad vector.

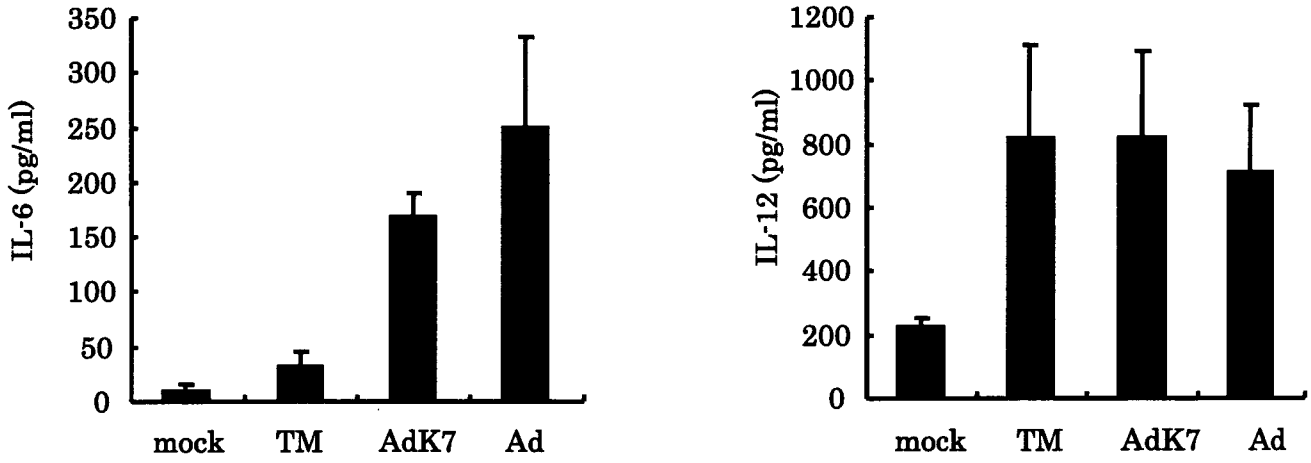


Fig. 8 Cytokine production induced by systemic administration of Ad vectors.

A final volume of 200 μl of each Ad vector ($1x10^{11}$ VP/mouse) was injected intravenously into each mouse. After 3 hours, peritoneal blood was collected, and the serum concentration of IL-6 and IL-12 was measured by ELISA. The TM, AdK7 and Ad indicates triple mutant Ad vector, AdK7 vector and conventional Ad vector, respectively. Data are expressed as means$\pm$S.D. of 3 mice per group.

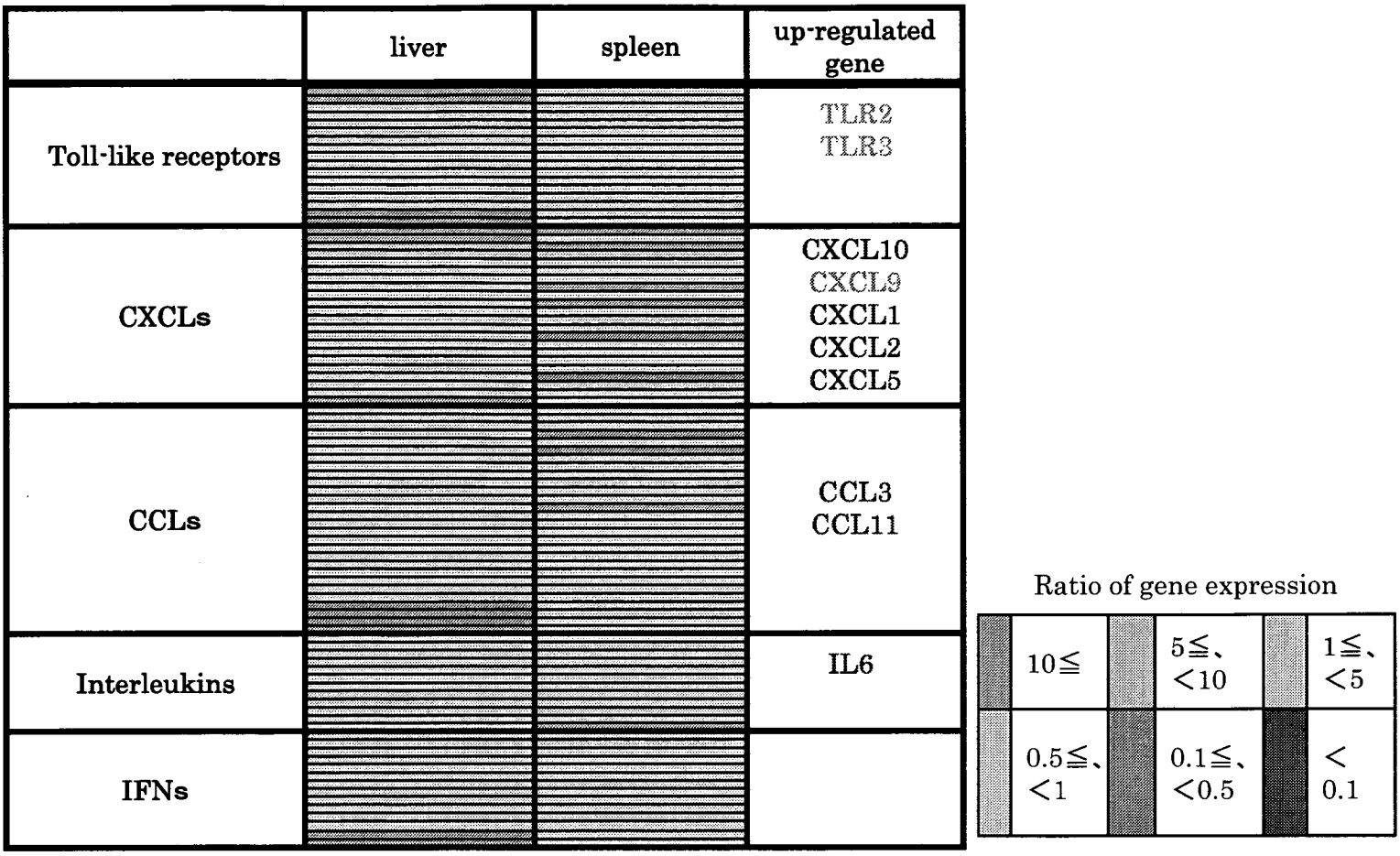


Fig. 9 Expression patern of genes involved in innate immune response after the systemic administration of conventional Ad vectors.

Final volume of 200 μl of conventional Ad vector ($1x10^{11}$ VP/mouse) was injected intravenously into each mouse. After 3 hours following injection, liver and spleen were collected and analysed by DNA microarray. Horizontal rows represent particular genes (colored according to the ratio of gene expression in conventional Ad vector-injected mice/ gene expression in Mock mice). If the copy number of particular gene is less than 1, its column is colored in grey. The column of "Up-regulated gene" indicates the name of genes up-regulated over 10-fold only in liver (pink), in spleen (blue), or in both tissue (purple).

A

	liver	spleen
10≦	40	29
10>A≧5	83	48
5>A≧1	9365	2337
1>A≧0.5	21436	8425
0.5>A≧0.1	3272	1116
<0.1	36	1
total	34232	11956

B

	liver	spleen
10≦	45	20
10>A≧5	134	38
5>A≧1	11256	1635
1>A≧0.5	21182	8335
0.5>A≧0.1	2340	1820
<0.1	28	5
total	34985	11873

C

	liver	spleen
10≦	7	4
10>A≧5	34	12
5>A≧1	7182	3789
1>A≧0.5	22420	8040
0.5>A≧0.1	4219	103
<0.1	17	0
total	33879	11948

Fig. 10 The level of gene expression profile by various kinds of Ad vector.

Final volume of 200 μl of conventional Ad vector ($1x10^{11}$ VP/mouse) was injected intravenously into each mouse. After 3 hours following injection, liver and spleen were collected and analysed by DNA microarray. Horizontal rows represent the particular range of changes induced by systemic administration of conventional Ad vector (A), AdK7 vector (B) and triple mutant Ad vector (C). The genes which the copy number is less than 1in both mock and Ad vector-treated mice are omitted.

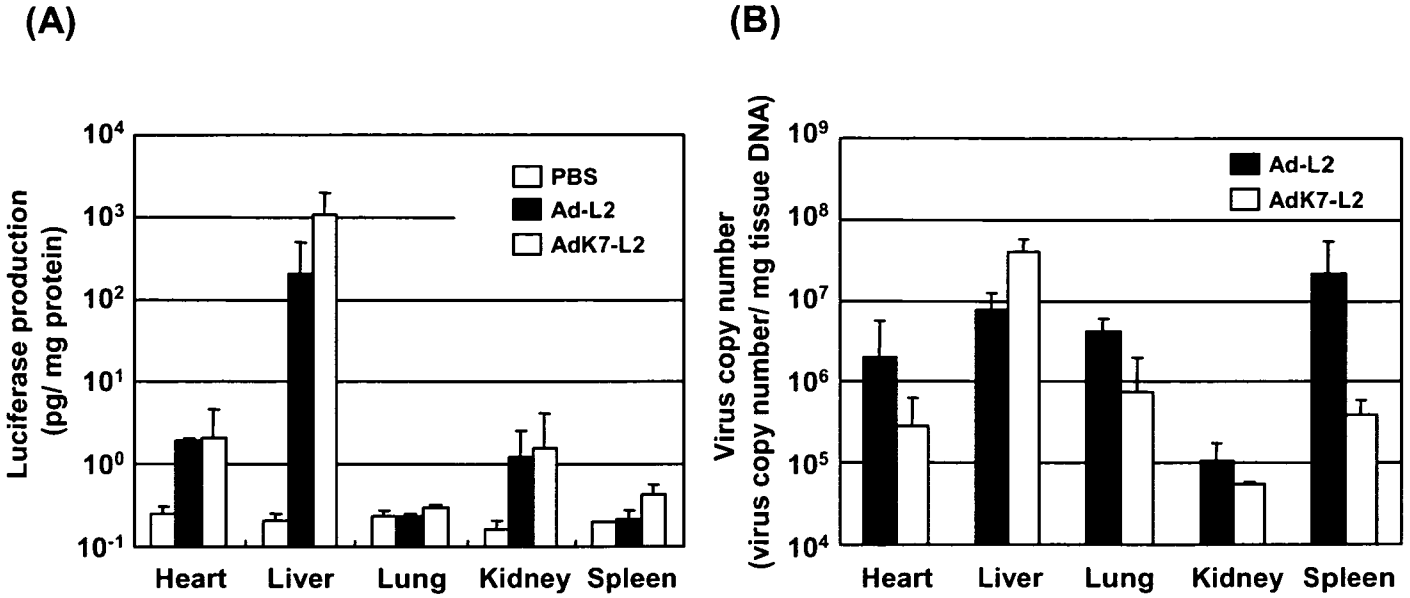


Fig. 11 Luciferase production and biodistribution of viral DNA after the intravenous administration of Ad-L2 or AdK7-L2 into mice.

Ad-L2 or AdK7-L2 ($1.0x10^{10}$ VP) was intravenously injected into the mice. Forty-eight hours later, the heart, lung, liver, kidney, and spleen were harvested, and luciferase production (A) and Ad vector DNA (B) in each organ were measured by a luciferase assay system or the quantitative TaqMan PCR assay, respectively. All data represent the means ± S.D. of 4-6 mice.

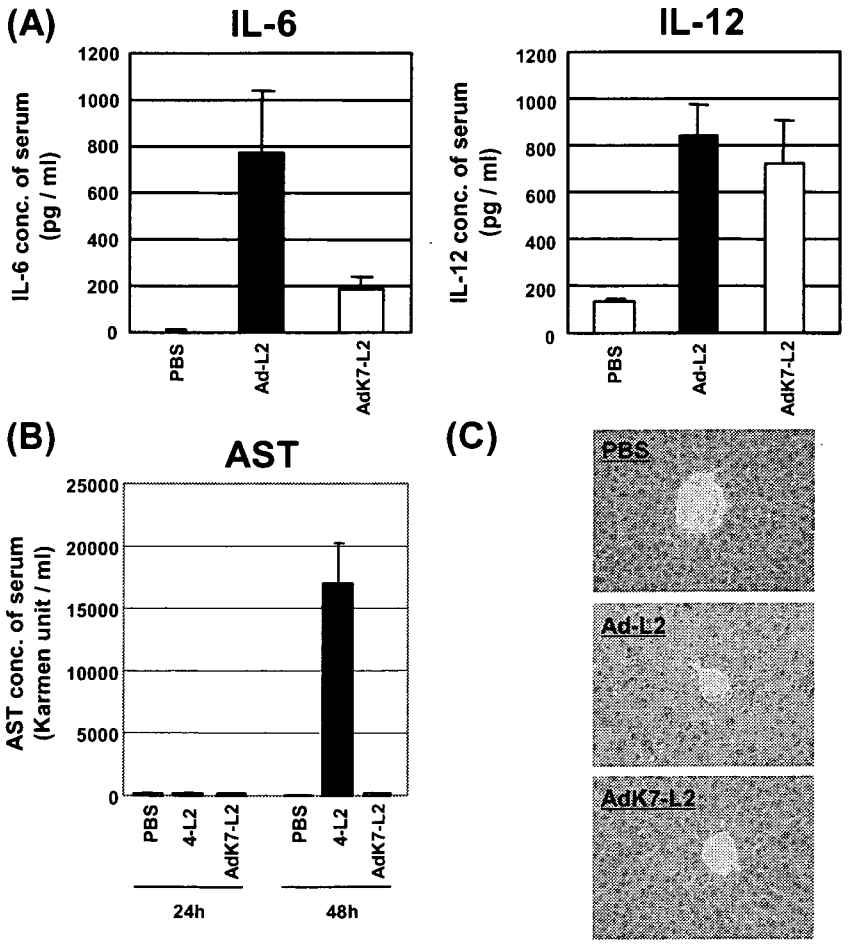


Fig. 12 Cytokines and liver enzyme levels in serum after the systemic administration of Ad-L2 or AdK7-L2 into mice.

Blood samples were collected by inferior vena cave at (A) 3 or (B) 24 and 48 hours after intravenous administration of Ad-L2 or AdK7-L2 ((A) $1.0x10^{11}$ VP or (B) $3.0x10^{10}$ VP). The livers were collected after 48 hours following the injection (C) ($3.0x10^{10}$ VP). (A) IL-6 and IL-12 levels in the serum were measured by ELISA. (B) Aspartate aminotransferase (AST) levels in the serum were measured using a Transaminase-CII kit. (C) Paraffin sections of the livers were prepared. Each section was stained with hematoxylin and eosin. Data represent the means ± S.D. of four mice.

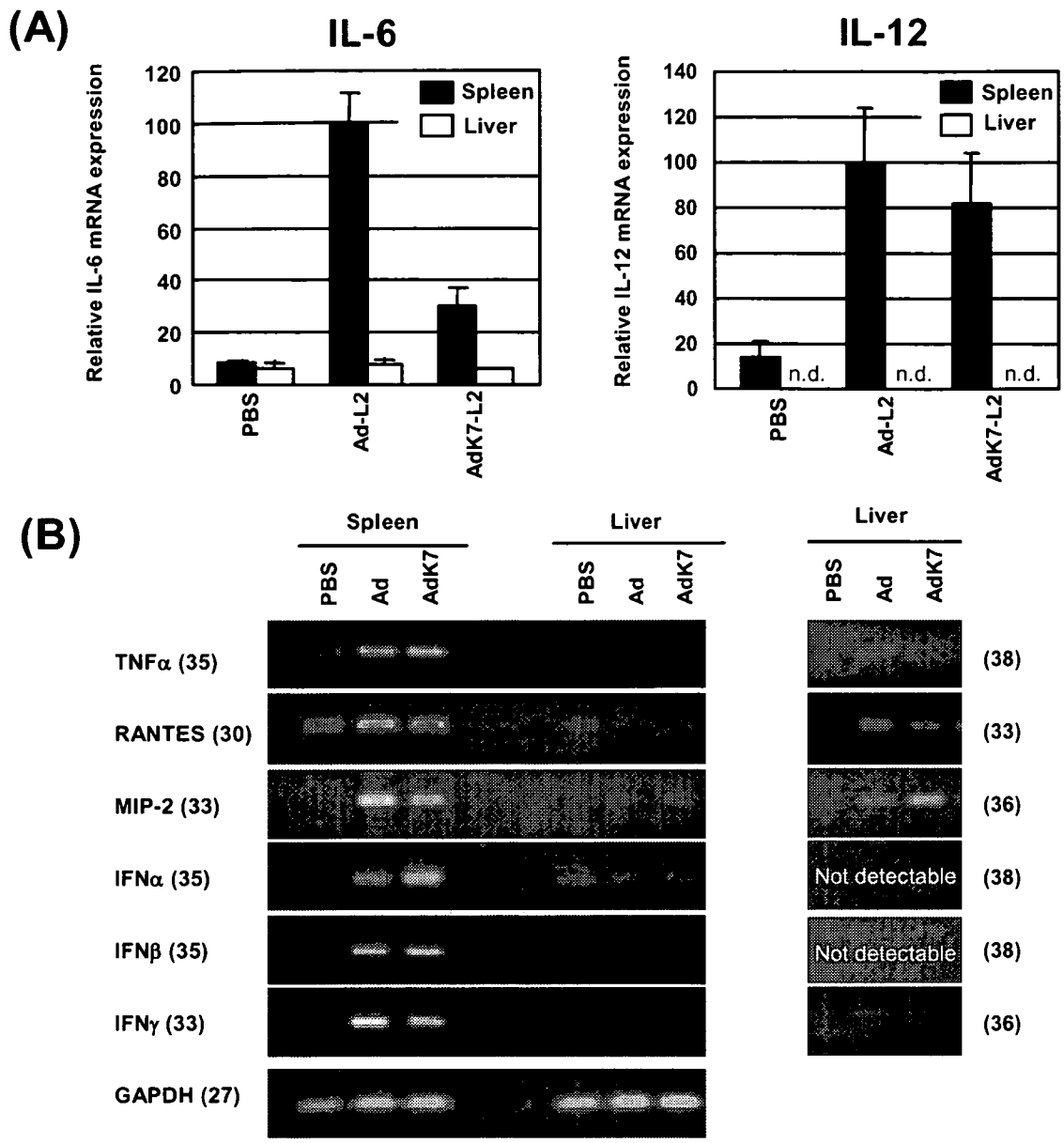


Fig. 13 Cytokine, chemokine, and interferon mRNA levels in liver and spleen after the systemic administration of Ad-L2 or AdK7-L2 into mice.

Total mRNA samples were isolated from liver and spleen at 3 hours after intravenous administration of Ad-L2 or AdK7-L2 (1.0×10^{11} VP). After the RT reaction IL-6 and IL-12 cDNA were measured with the quantitative TaqMan PCR assay (A). The expression of TNFα, RANTES, MIP-2, IFNα, IFNβ, and IFNγ was measured by semi-quantitative RT-PCR assay (B). All data represent the means ± S.D. of four mice. ( ); cycle number

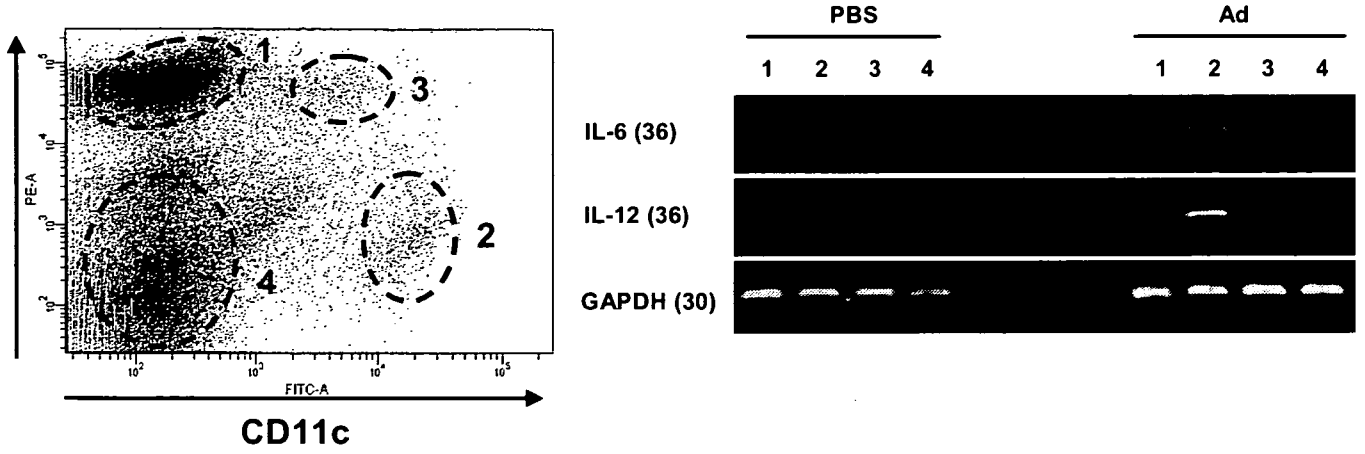


Fig. 14 IL-6 and IL-12 mRNA levels in splenic CD11c positive cells after the systemic administration of Ad-L2 into mice.

Total mRNA samples were isolated from sorted splenic cells at 3 hours after intravenous administration of Ad-L2 ($1.0x10^{11}$ VP). The expression levels of IL-6 and IL-12 mRNA were measured by RT-PCR assay. (lane 1) B cell ($B220^+$, $CD11c^-$); (lane 2) conventional DC ($B220^-$, $CD11c^+$); (lane 3) plasmacytoid DC ($B220^+$, $CD11c^{+/-}$); (lane 4) other cell ($B220^-$, $CD11c^-$). ( ); cycle number

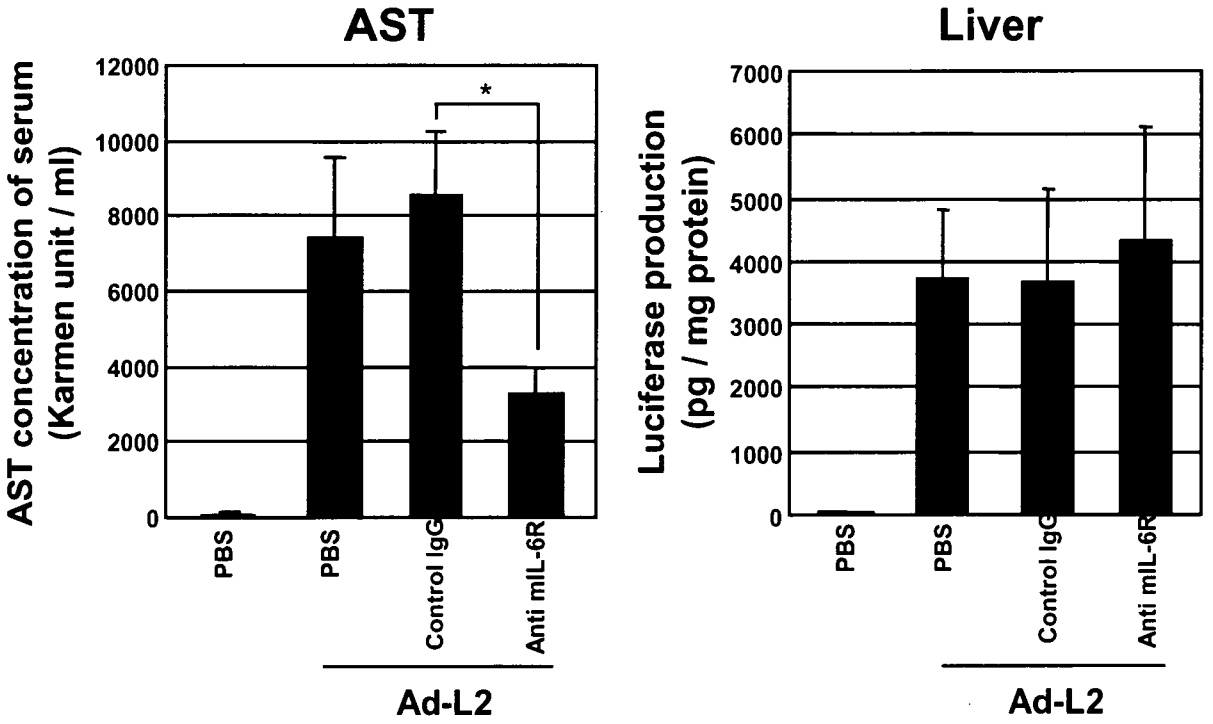


Fig. 15 Effects of serum IL-6 on serum AST levels and liver luciferase production after the systemic administration of Ad-L2 into mice.

C57Bl6 mice were intraperitoneally administered with 100 μg/mouse of anti-IL-6 receptor antibody (clone; D7715A7), which was specific for blocking IL-6 signaling, or rabbit IgG as a control (clone; R3-34). Ad-L2 or AdK7-L2 ($3.0x10^{10}$ VP) was intravenously injected into the mice 1.5 hours later. Blood samples and liver tissue were collected 48 hours after the injection of Ad-L2. The AST levels in the serum were measured using a Transaminase-CII kit. Luciferase production in the liver was measured by a luciferase assay system. All data represent the means ± S.D. of 3-4 mice. *, $p<0.01$.

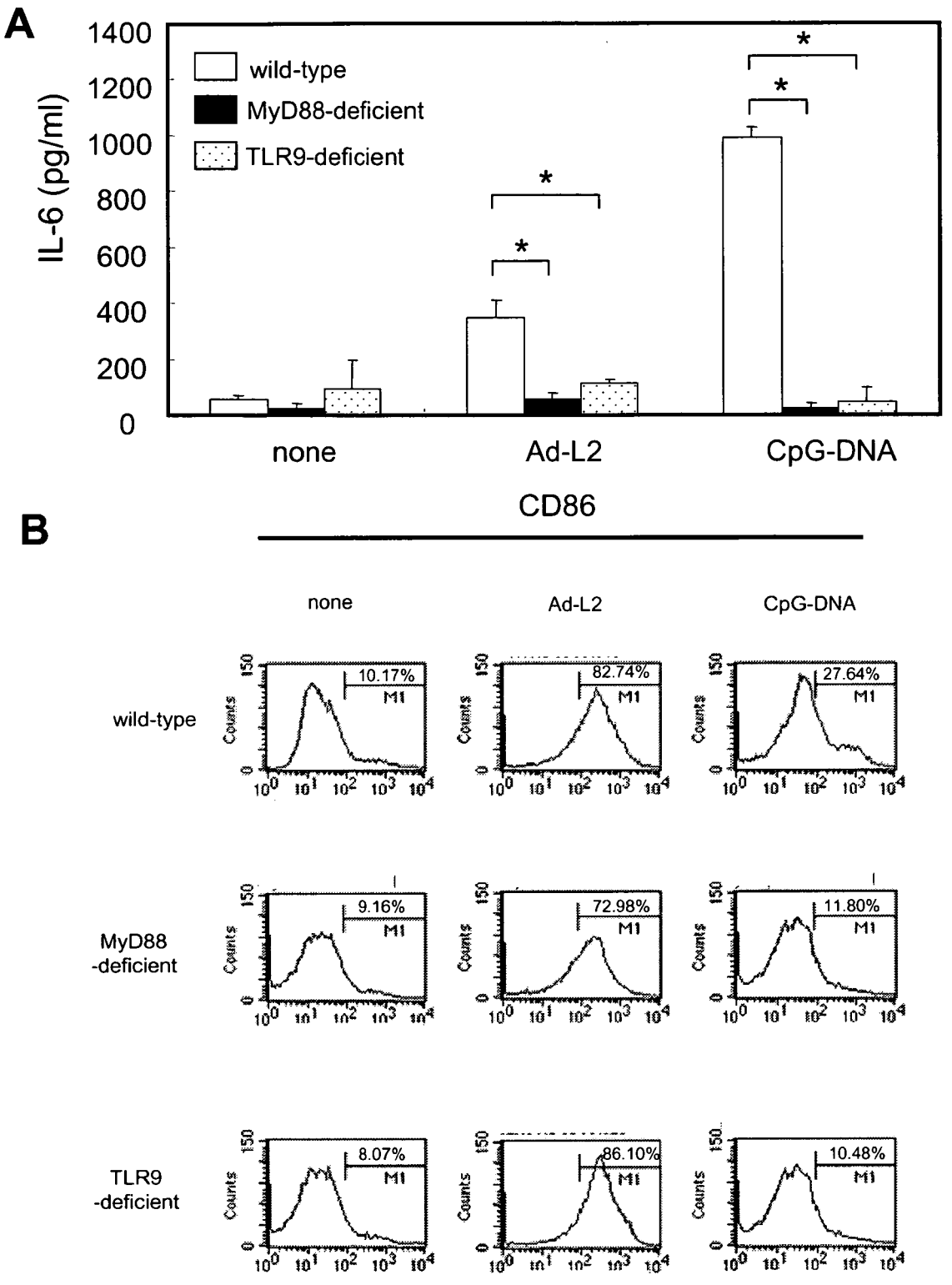


Fig. 16 MyD88- and TLR9-dependent activation of GMCSF-DCs after Ad infection.
(A) Ad-induced IL-6 production. GMCSF-DCs from wild-type, MyD88-deficient and TLR9-deficient mice were stimulated with Ad-L2 (10,000 VP/cell) or CpG-DNA (2.5mM) for 48 hours, and the production of IL-6 in the culture supernatants was measured by ELISA. All data represent the means ± S.D. (n=3). (B) Ad-induced maturation of GMCSF-DCs. GMCSF-DCs from wild-type, MyD88-deficient and TLR9-deficient mice were stimulated with Ad-L2 (10,000 VP/cell) or CpG-DNA (2.5mM). After 48 hours incubation, the cells were collected, stained with FITC-labeled monoclonal anti-mouse CD11c antibody and PE-labeled monoclonal anti-mouse CD86 antibody, and subjected to flowcytometric analysis. The results were representative of two independent experiments.
* $p<0.01$.

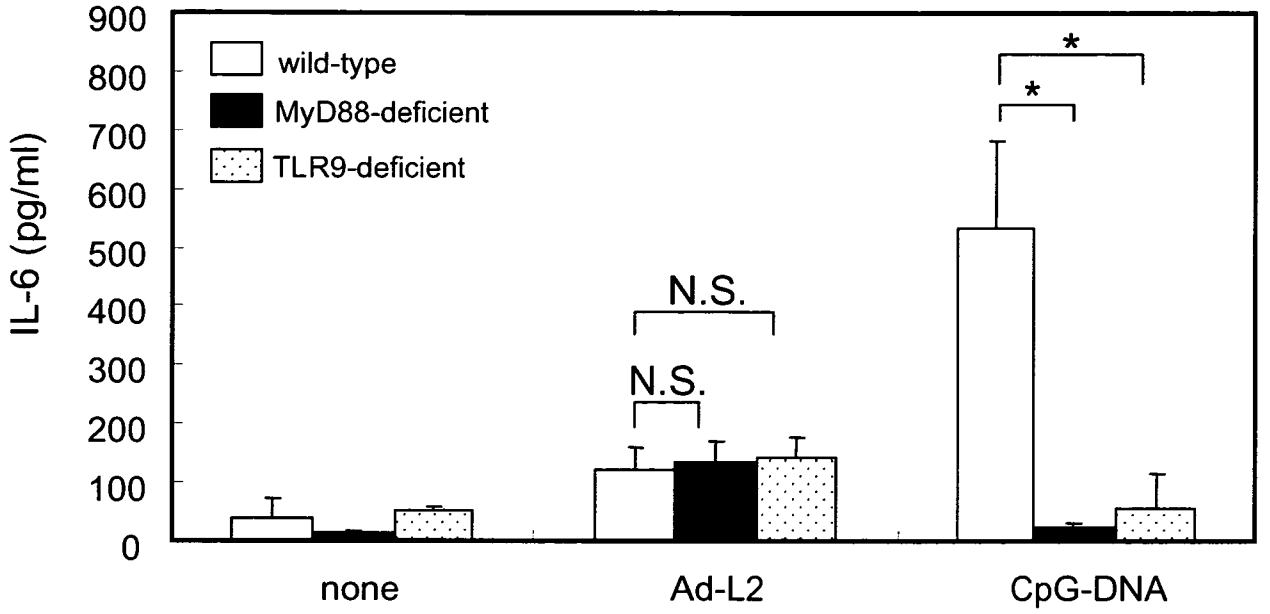


Fig. 17 MyD88- and TLR9-independent IL-6 production in peritoneal macrophages stimulated with Ad vectors.

IFN-γ-activated peritoneal macrophages from wild-type, MyD88-deficient and TLR9-deficient mice were incubated with Ad-L2 (10,000 VP/cell) or CpG-DNA (2.5mM) for 48 hours, and the amounts of IL-6 in the culture supernatants were measured by ELISA. All data represent the means ± S.D. (n=3). N.S., not significantly different. * $p<0.01$.

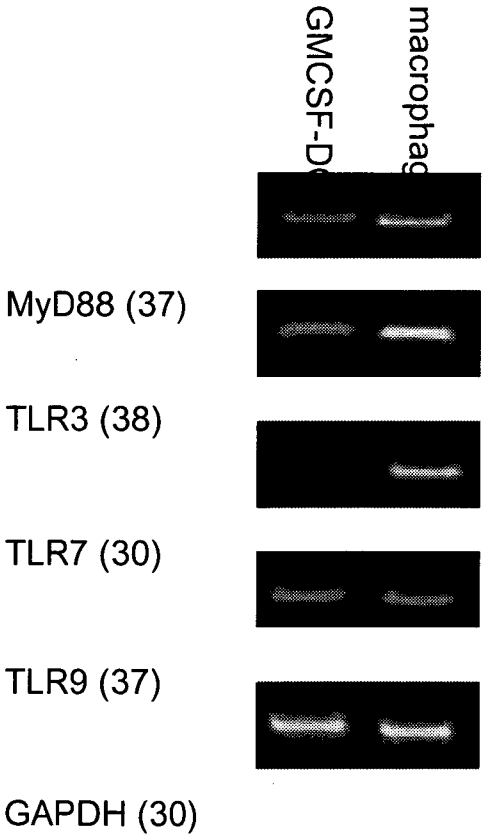


Fig. 18 MyD88, TLR3, TLR7, and TLR9 mRNA expression in immune cells.

Total RNA samples were isolated from GMCSF-DCs and peritoneal macrophages. The expression of MyD88, TLR3, TLR7, and TLR9 mRNA were tested by RT-PCR. (lane 1) GMCSF-DCs; (lane 2) peritoneal macrophages. ( ); cycle number.

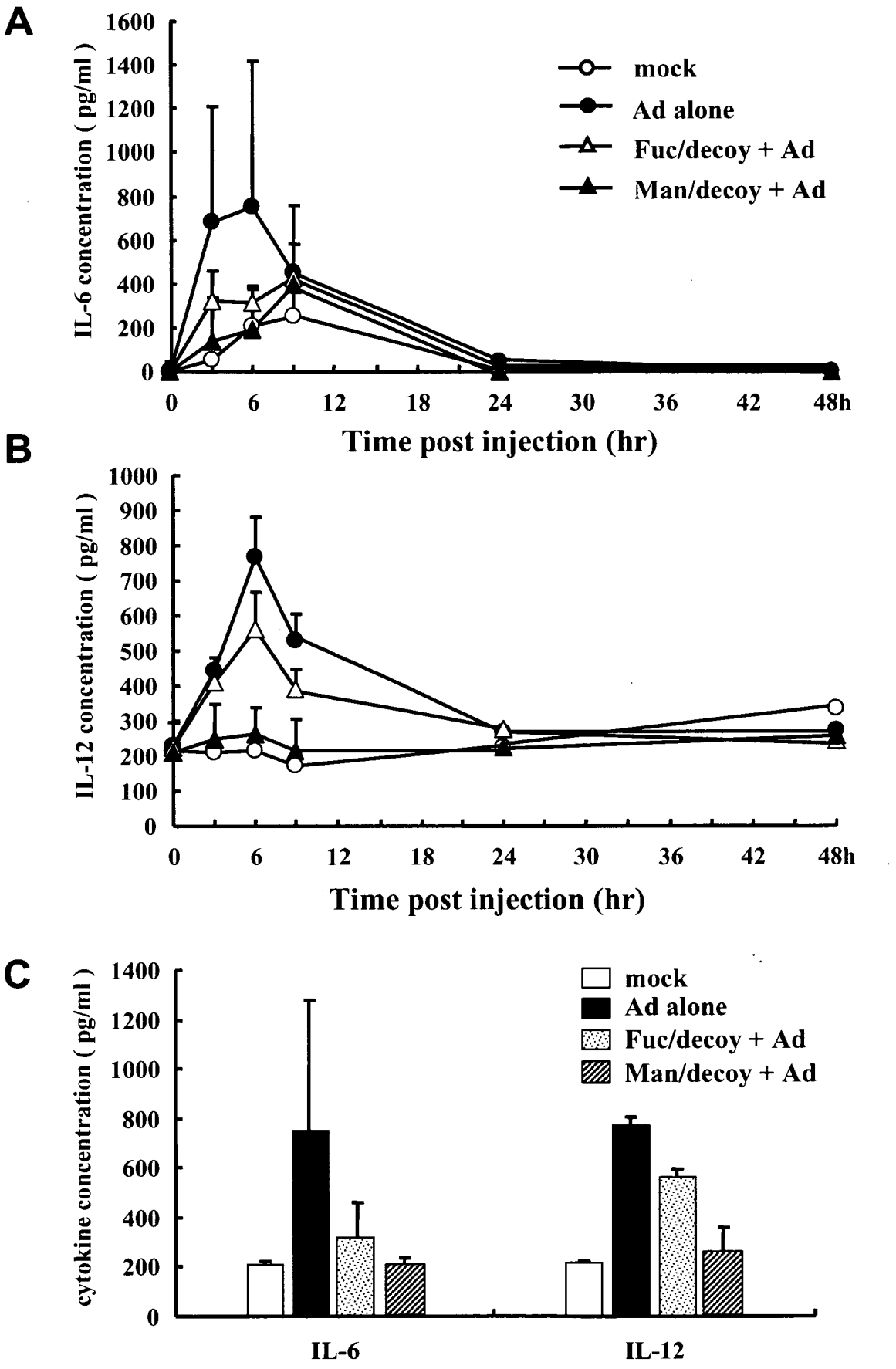


Fig. 19 Induction of various inflammatory cytokines by intravenous injection of Ad vectors. A final volume of 200 μl of Ad vectors (5×10^{10} VP/mouse) was injected intravenously into each mouse 10 min after complexes pre-injection. After the indicated time had passed following the Ad injection, peripheral blood serum was collected, and the concentration of IL-6 (A) and IL-12 (B) were measured by ELISA. Data of 6 h after the injection was shown in C. The white bar indicates mock treatment. All data are expressed as mean ±S.D. of 6 mice per group.

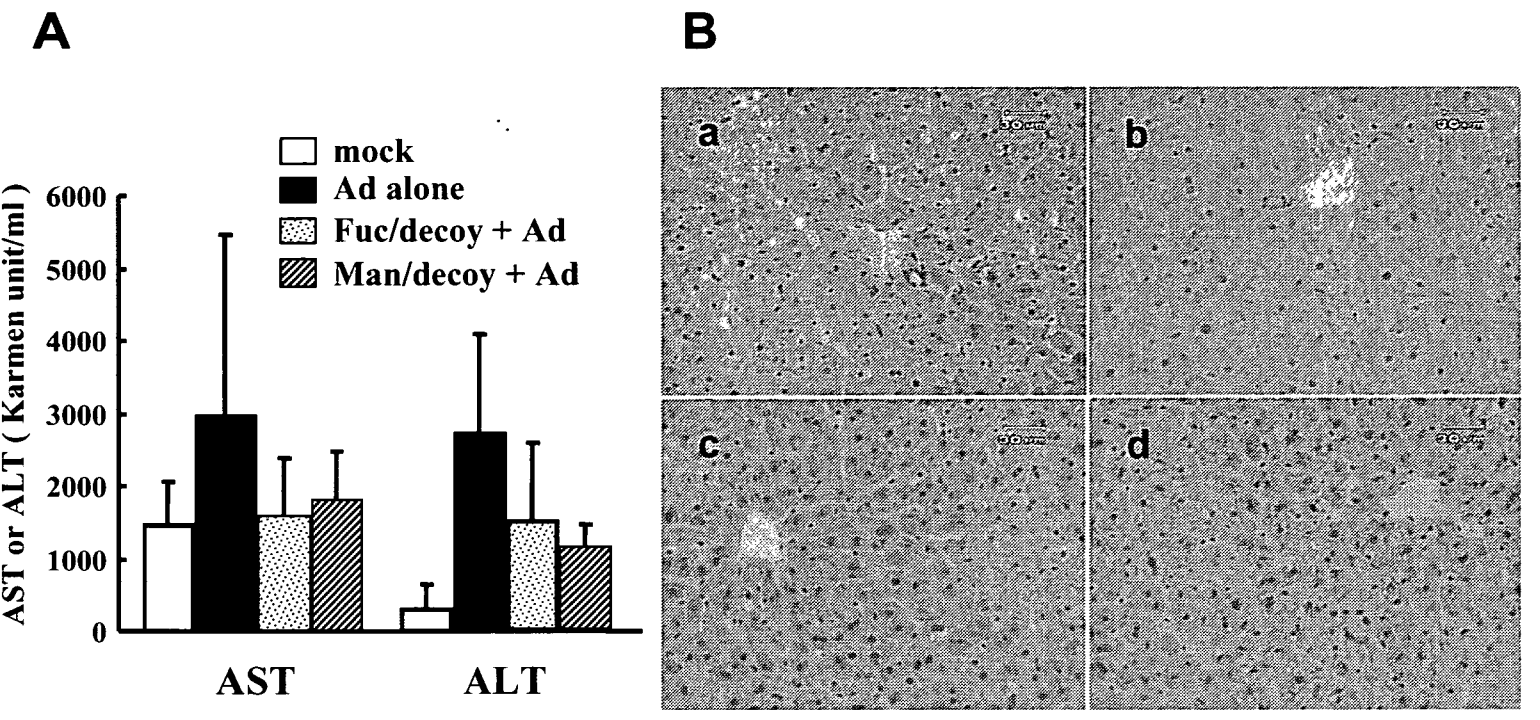


Fig. 20 Hepatotoxicity by intravenous injection of Ad vectors.
(A) A final volume of 200 μl of Ad vectors (5×10^{10} VP/mouse) was injected intravenously into each mouse at 10 min after complexes pre-injection. Fourty-eight h after the Ad injection, peripheral blood serum was collected, and the ALT and AST activity were measured. The white bar indicates mock treatment. Data are expressed as mean ±S.D. of 6 mice per group. (B) The frozen sections of livers of 48 h after the Ad were prepared, and stained with Hematoxylin and Eosin. (a) mock, (b) Ad vector alone, (c) Fuc/decoy complex + Ad vector, (d) Man/decoy complex + Ad vector.

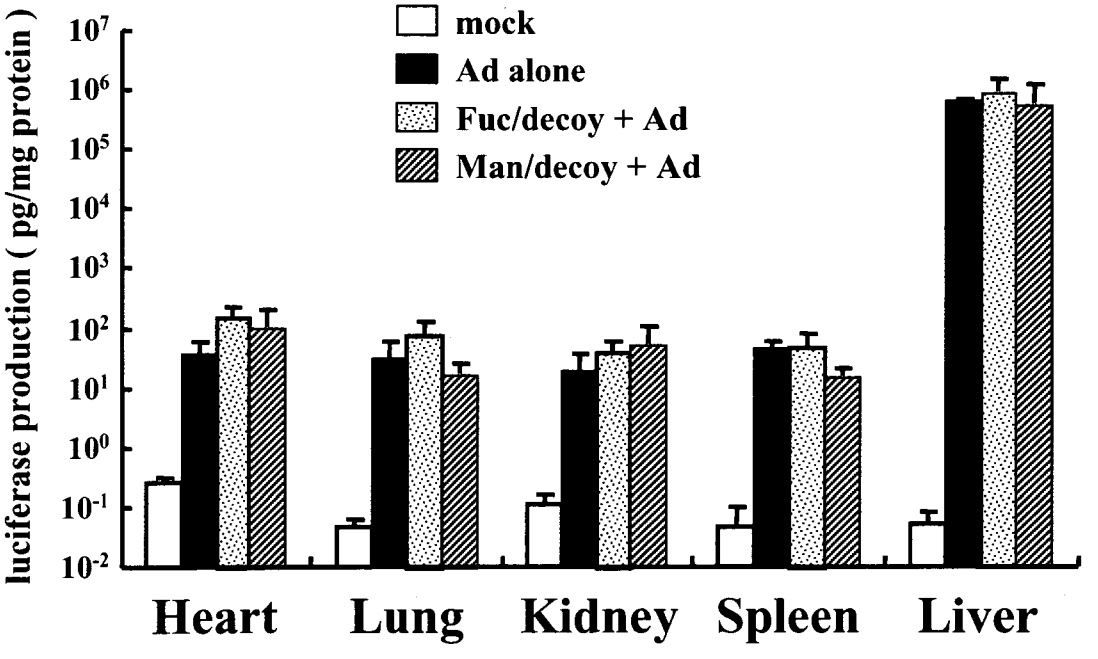


Fig. 21 Luciferase production in various organs after intravenous injection of Ad vectors.
A final volume of 200 μl of Ad vectors (5×10^{10} VP/mouse) was injected intravenously into each mouse at 10 min after complexes pre-injection. Organs were collected 48 h after the Ad injection, and luciferase activity and protein concentration were measured. The white bar indicates mock treatment. All data are expressed as mean ±S.D. of 6 mice per group.

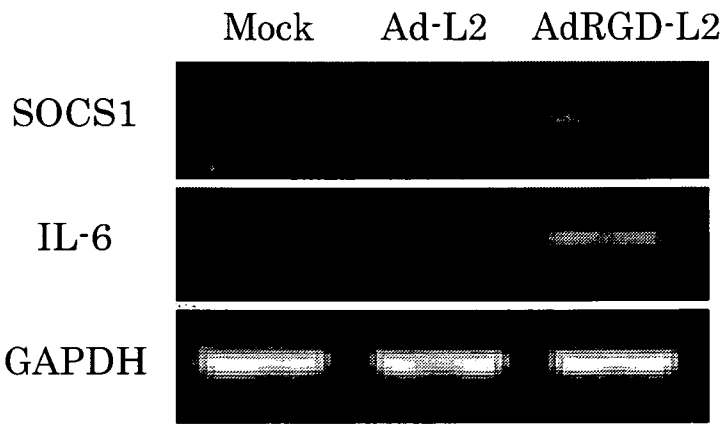


Fig. 22 SOCS1 expression in Ad vector-transduced RAW264.7 cells.
Total mRNA samples were isolated from RAW264.7 cells 6 h after the transduction of Ad-L2 or AdRGD-L2 (10,000 VP/cell). After the reverse transcriptase reaction, SOCS1 and IL-6 mRNA levels were measured by semiquantitative RT-PCR assay.

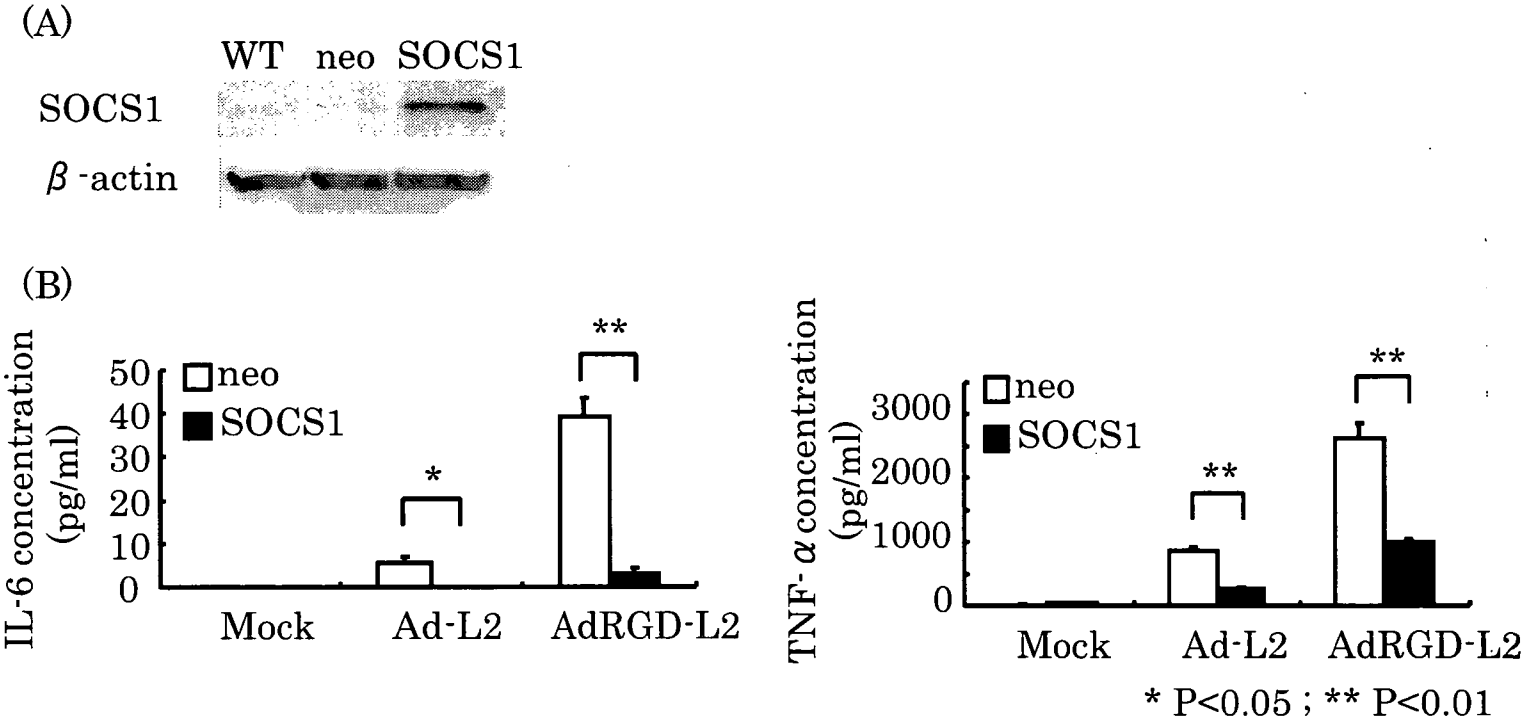


Fig. 23 Ad vector-mediated induction of cytokine production in RAW264.7-SOCS1 cells.
The expression of SOCS1 in RAW264.7-SOCS1 cells was detected by Western blot analysis (A). IFN-γ-activated RAW264.7-neo cells and RAW264.7-SOCS1 cells were stimulated by Ad-L2 or AdRGD-L2 (10,000 VP/cell) for 24 h. The concentration of IL-6 and TNF-α in the cultured supernatants was measured by ELISA (B). All data are represented as the means ± S.D. (n=3).

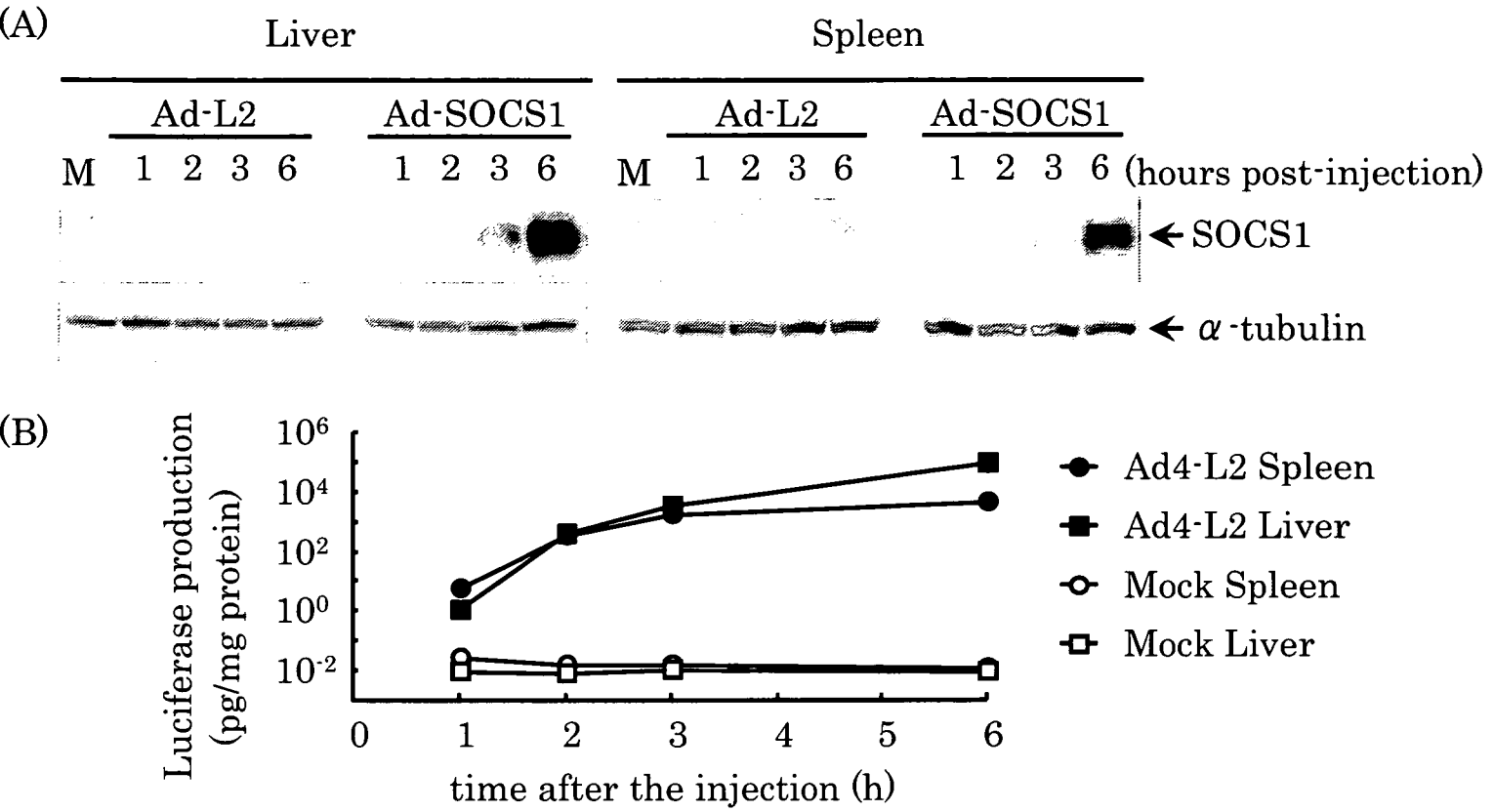


Fig. 24 Transgene expression in the liver and spleen by the systemic administration of Ad vectors.

Ad-SOCS1-mediated SOCS1 expression in the liver and the spleen was examined at 1, 2, 3, and 6 h after i.v. injection of Ad vectors, as determined by Western blotting (A). Luciferase production in the liver and the spleen was examined at 1, 2, 3, and 6 h after i.v. injection of Ad-L2, as determined by luciferase assay (B). M; Mock

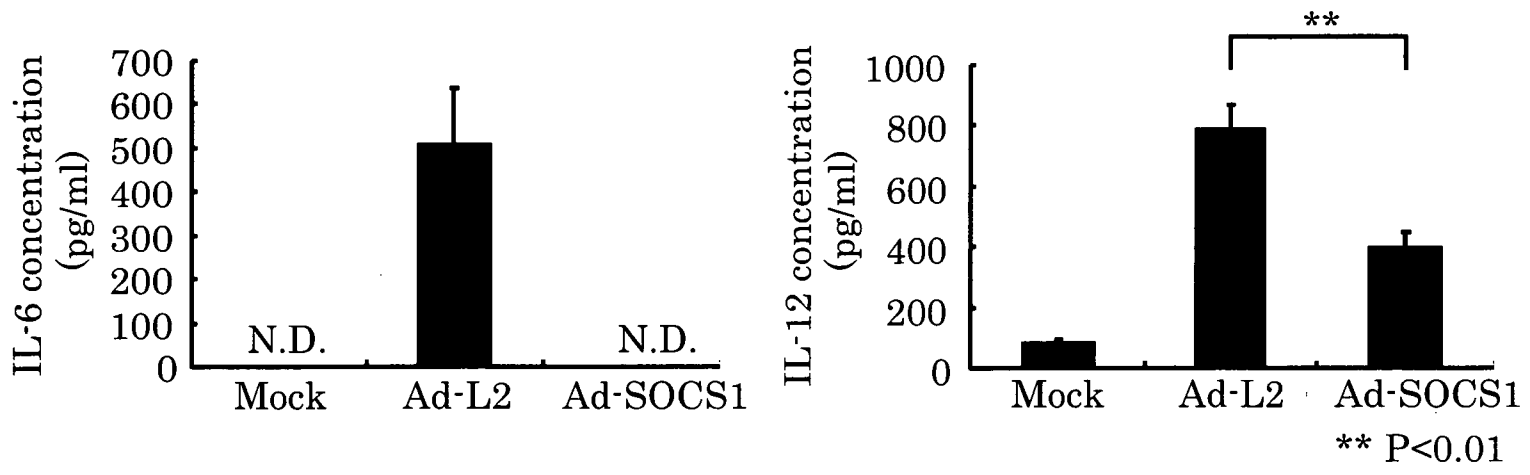


Fig. 25 Inflammatory cytokine production after the systemic administration of Ad-L2 or Ad-SOCS1 into mice.

Ad-L2 or Ad-SOCS1 (5×10^{10} VP/mouse) was i.v. injected into mice. Six hours later, blood samples were collected from the inferior vena cava, and the concentrations of IL-6 and IL-12 in the serum was measured by ELISA. All data are represented as the means ± S.D. (n=3~4).

N.D.; not detectable

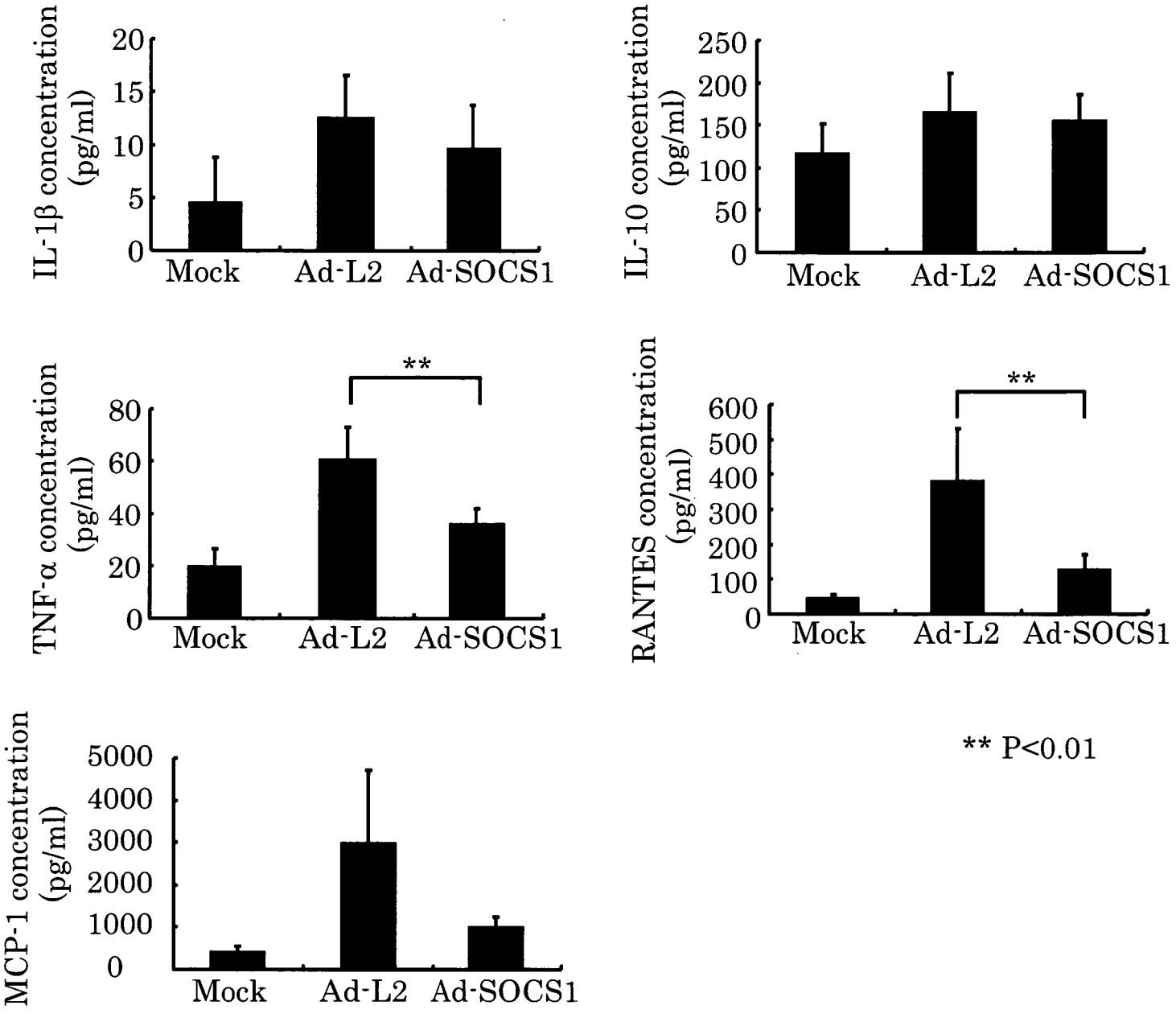
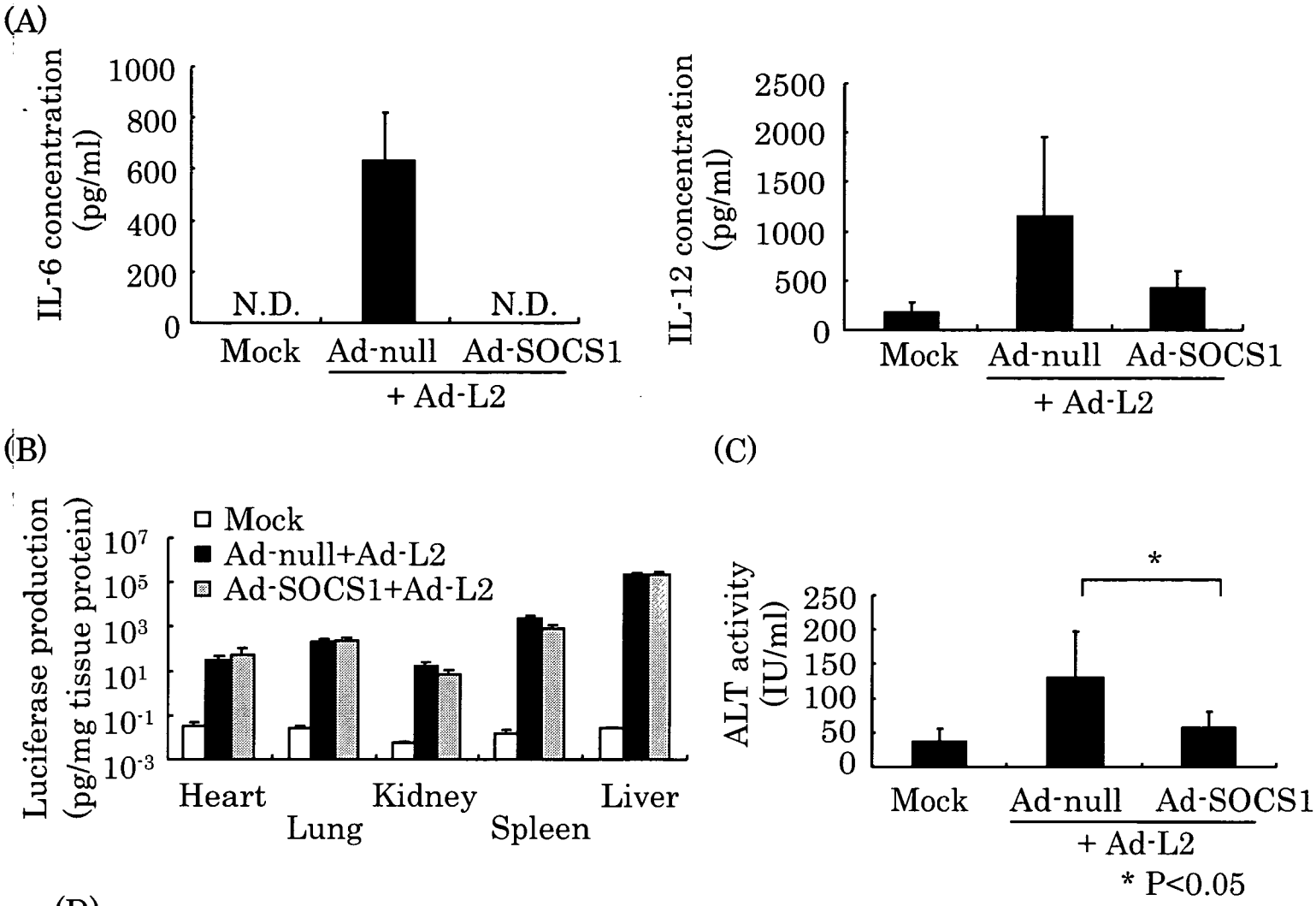


Fig. 26 Inflammatory cytokine/chemokine production after the systemic administration of Ad-L2 or Ad-SOCS1 into mice.

Ad-L2 or Ad-SOCS1 (5×10^{10} VP/mouse) was i.v. injected into mice. Six hours later, blood samples were collected from the inferior vena cava, and the concentrations of IL-1b, IL-10, TNF-α, RANTES, and MCP-1 in serum of Ad vector-injected mice were measured by Bio-plex. All data are represented as the means ± S.D. (n=3~4).



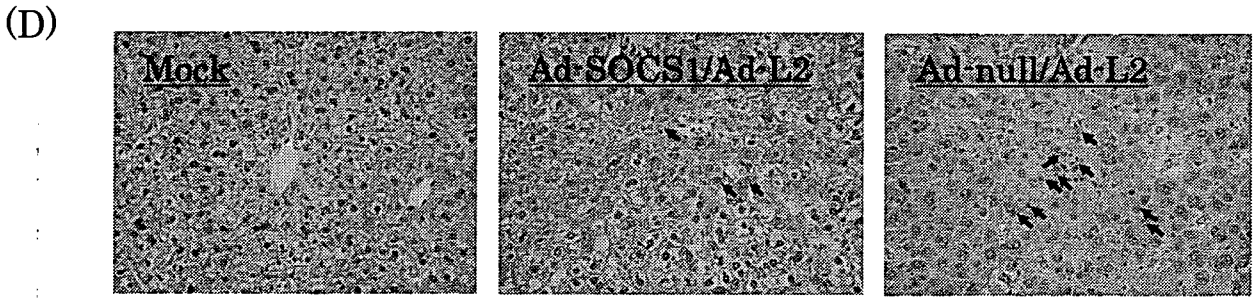


Fig. 27 Inflammatory cytokine production, luciferase production, and liver toxicity after the systemic co-injection of Ad-L2 and Ad-SOCS1 into mice.

Ad-L2/Ad-null or Ad-L2/Ad-SOCS1 were intravenously co-injected into mice (Ad-L2: Ad-SOCS1=1:9; total 5×10^{10} VP/mouse). Blood samples were collected from the fundus oculi at 6 h (A) or 24 h (C) after injection. The heart, lungs, kidneys, liver and spleen were harvested at 24 h (B and D) following the injection. A, The concentrations of IL-6 and IL-12 in the serum were measured by ELISA. B, Luciferase production in each organ was measured using a luciferase assay system. C, ALT levels in the serum were measured using a Transaminase-CII kit. D, Paraffin sections of the livers were prepared, and each section was stained with H&E. The arrowheads indicate dead cells. All data are represented as the means ± S.D. (n=3).

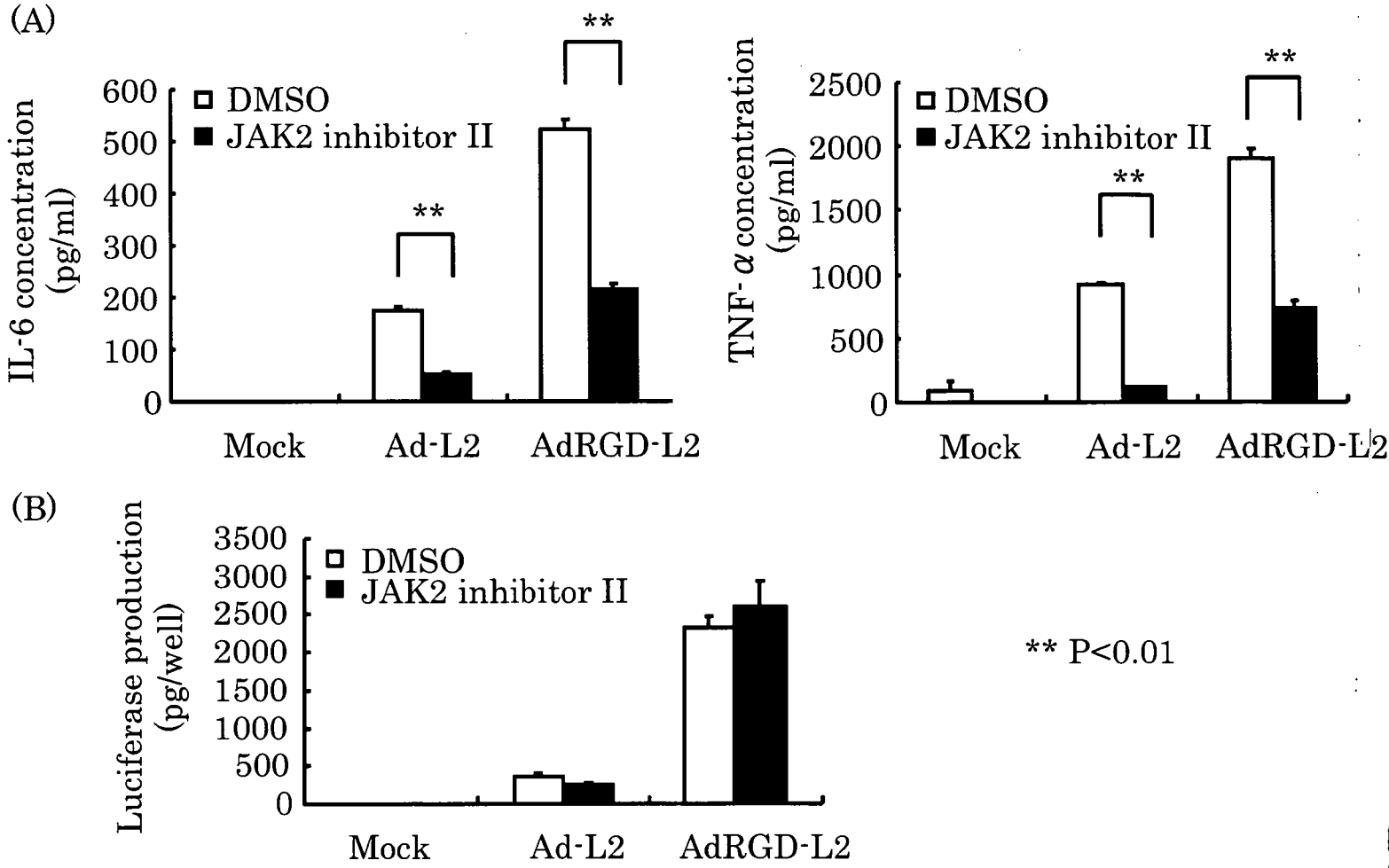


Fig. 28 JAK2 inhibitor II suppresses the Ad vector-mediated cytokine production and luciferase production in RAW264.7 cells.

RAW264.7 cells pre-treated with IFN-g were incubated with JAK2 inhibitor II (50 μM) for 1 h and the cells were stimulated by Ad vectors for 24 h. A, The concentrations of IL-6 and TNF-α in the cultured supernatants were measured by ELISA. B, Luciferase production in the cells was examined using a luciferase assay system. All data are represented as the means ± S.D. (n=3).

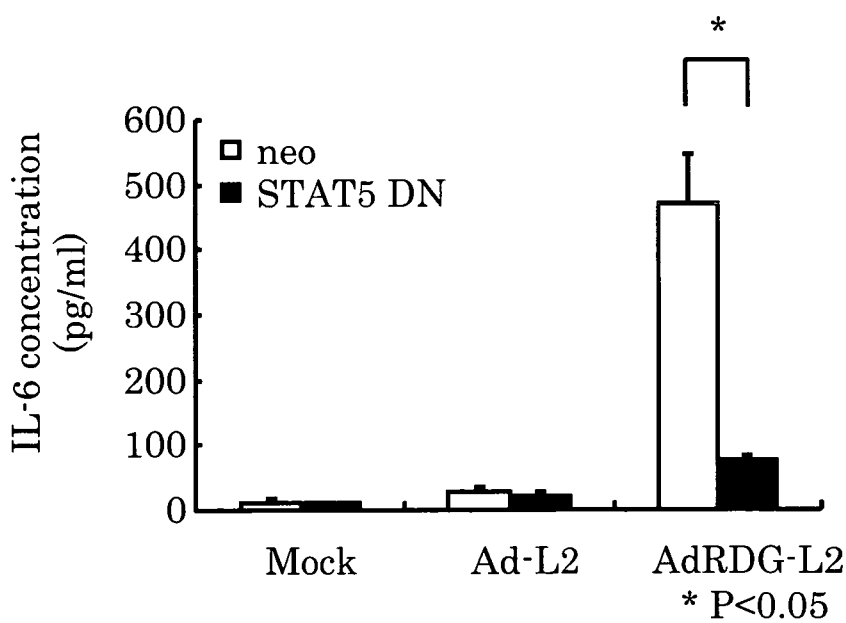


Fig. 29 Ad vector-mediated induction of cytokine production in RAW-STAT5DN cells.

IFN-γ-activated RAW-neo cells and RAW-STAT5DN cells were stimulated by Ad-L2 or AdRGD-L2 (10,000 VP/cell) for 24 h. The concentration of IL-6 in the cultured supernatants was measured by ELISA (A). All data are represented as the means ± S.D. (n=3).

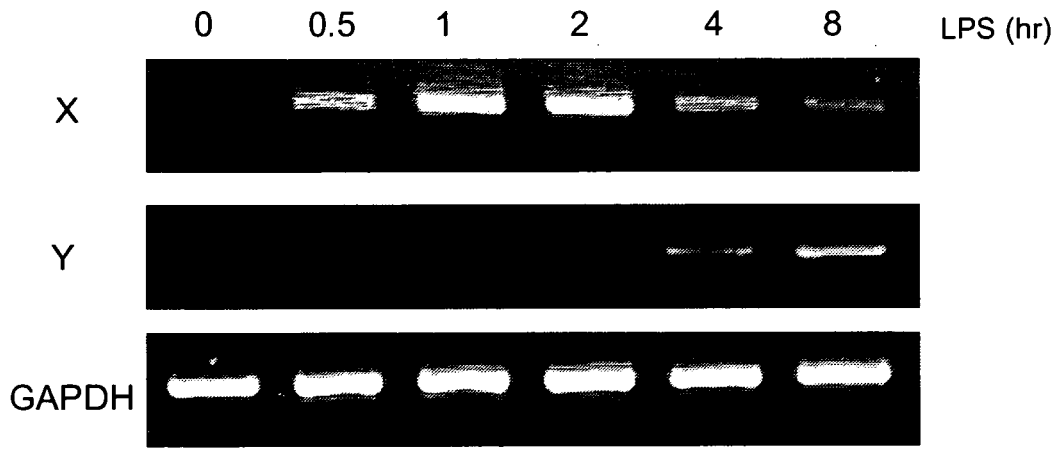


Fig. 30 X and Y mRNA expression was induced in RAW264.7 cells upon LPS stimulation.
RAW264.7 cells were cultured with LPS (1 mg/ml) for the indicated length of time (hours). Total RNA from these cells was converted into cDNA. Equal amounts of cDNA from each sample was used as a template for PCR to amplify X (top), Y (middle), and GAPDH as a dose control (bottom).

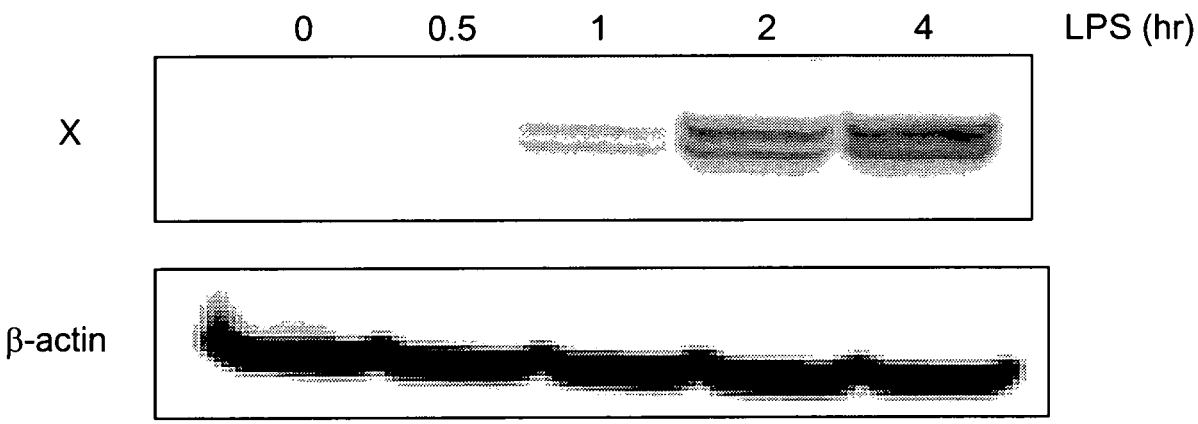


Fig. 31 Protein expression of X was induced in RAW264.7 cells upon LPS stimulation.
RAW264.7 cells were cultured with LPS (1 mg/ml) for the indicated length of time (hours). Cell extracts were prepared from these cells and subjected to immunoblot analysis with anti-X antibody (top). This blot was reprobed with anti-b-actin antibody to control for the amount of the extracts used (bottom).

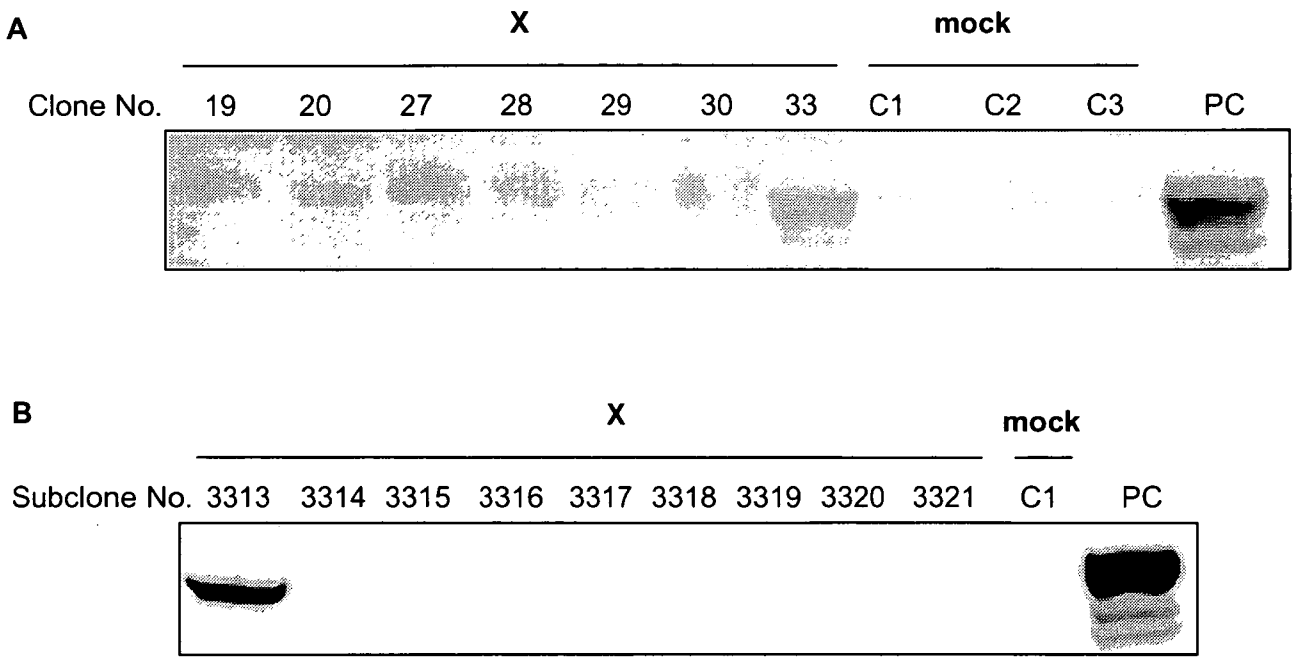


Fig. 32 Establishment of RAW264.7- stable transfectant overexpressing protein X.
RAW264.7 cells were stably transfected with cDNA encoding X as described in materials and methods. (A) Cell extracts from G418 resistant cells were subjected to western blot analysis with anti-X antibody. (B) Subcloning of X/RAW clone No.33. Cell extract from RAW264.7 cells stimulated with LPS for 4 hr was used as a positive control (PC), and stably transfected with mock vector (pcDNA3) was used as a negative control (NC).

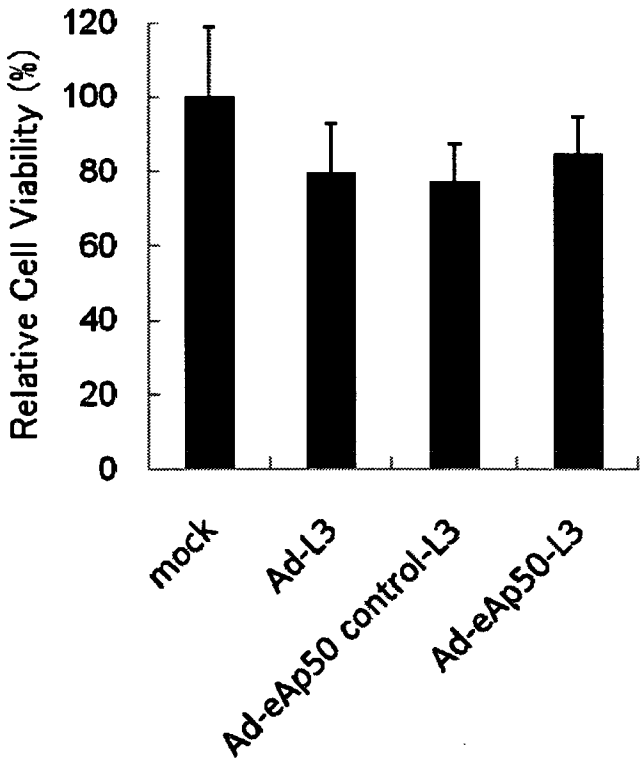


Fig. 33 Cell viability of A549 cells transduced with Ad-eAp50-L3.
A549 cells were transduced with 3000 vp/cell od Ad-L3, Ad-eAp50-L3, Ad-eAp50control-L3 for 1.5h. After 24 h-cultivation, the cell viability was measured using the Alamar blue assay. Data are expressed as means ± SD of triplicate culture.

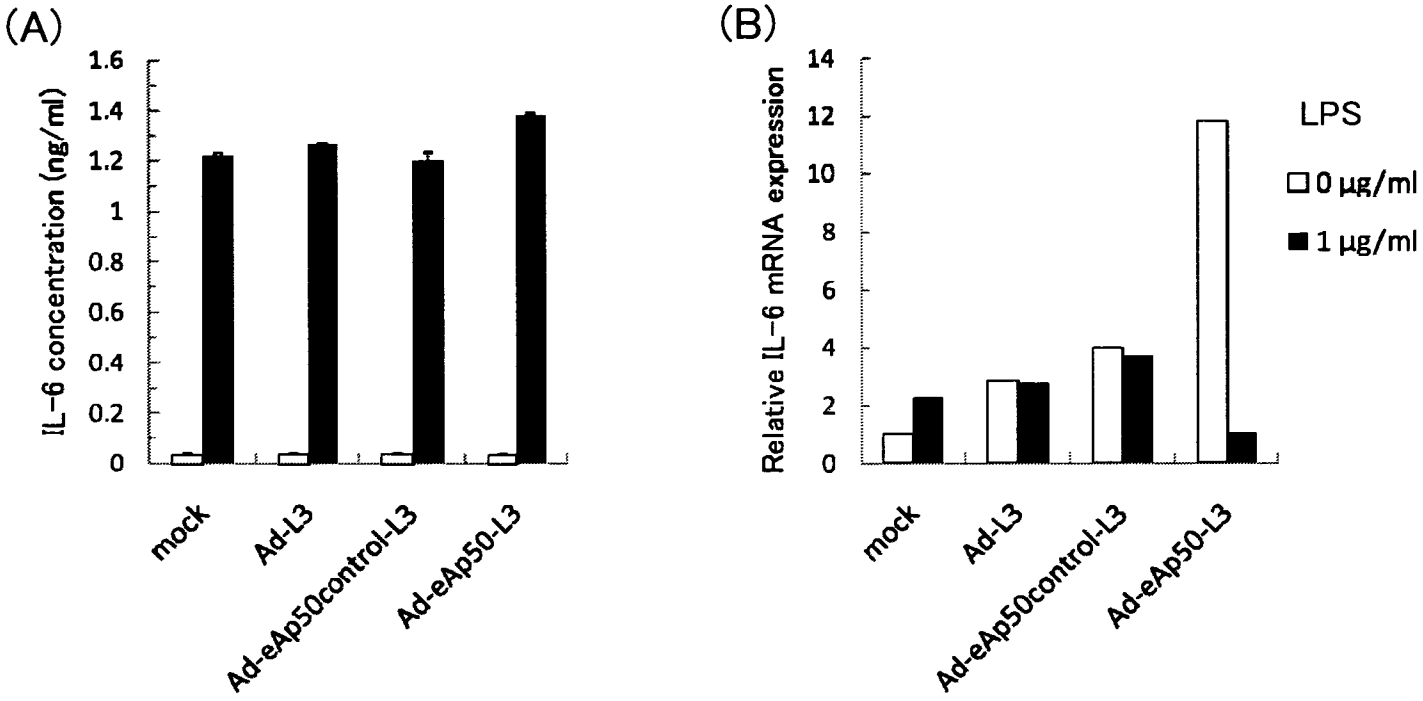


Fig. 34 Ad-eAp50 vector-mediated suppression of cytokines on the LPS-stimulated MS-1 cells.

The MS-1 cells were transduced with 3000 vp/cell of Ad-L3, Ad-eAp50-L3, or Ad-eAp50control-L3 for 1.5 h. After 24 hr-cultivation, cells were stimulated with LPS (1 mg/ml) in DMEM containing 10% FCS for 24 h. IL-6 levels in their supernatants were measured by ELISA (A). Total mRNA samples of stimulated cells were isolated, and IL-6 cDNA were measured using the quantitative TaqMan PCR assay after the RT reaction (B). Data are expressed as means ± SD of triplicate culture.

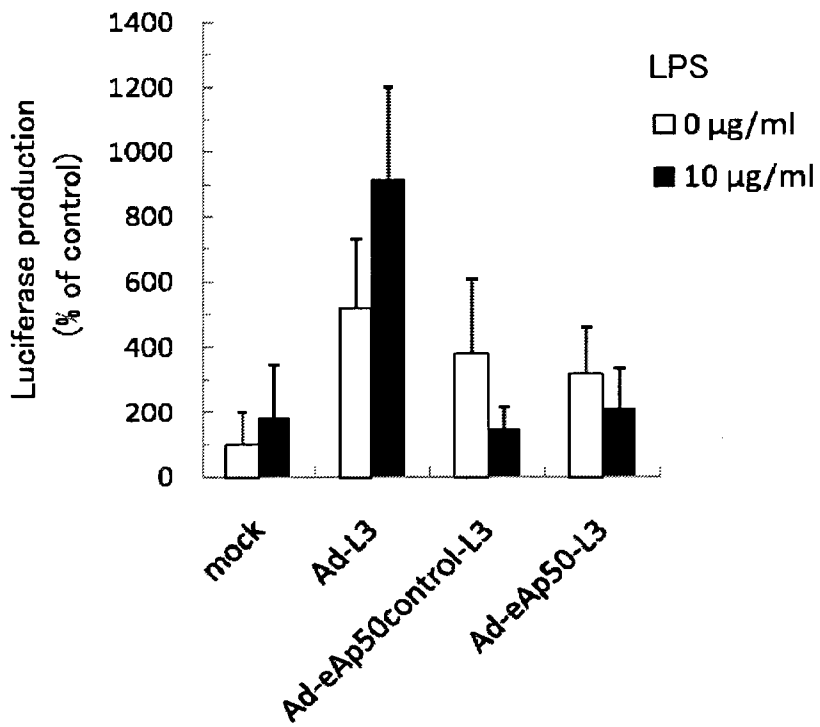


Fig. 35 Ad-eAp50 vector-mediated suppression of NF-κB in A549 cells.

The cells, which were transfected with the renilla reniformis luciferase reporter plasmid (p-ELAM-RL), were transduced with 3000 vp/cell Ad-L3, Ad-eAp50-L3, Ad-eAp50control-L3 for 1.5 h. After 24 hr-cultivation, cells were stimulated with LPS (10 mg/ml) in MEM containing 10% FCS for 1 h, and renilla reniformis luciferase activity was measured using the dual-luciferase reporter assay system. Renilla reniformis luciferase activity was normalized by the amount of proteins of the cell lysate. Data are presented as the means ± SE of triplicate culture.

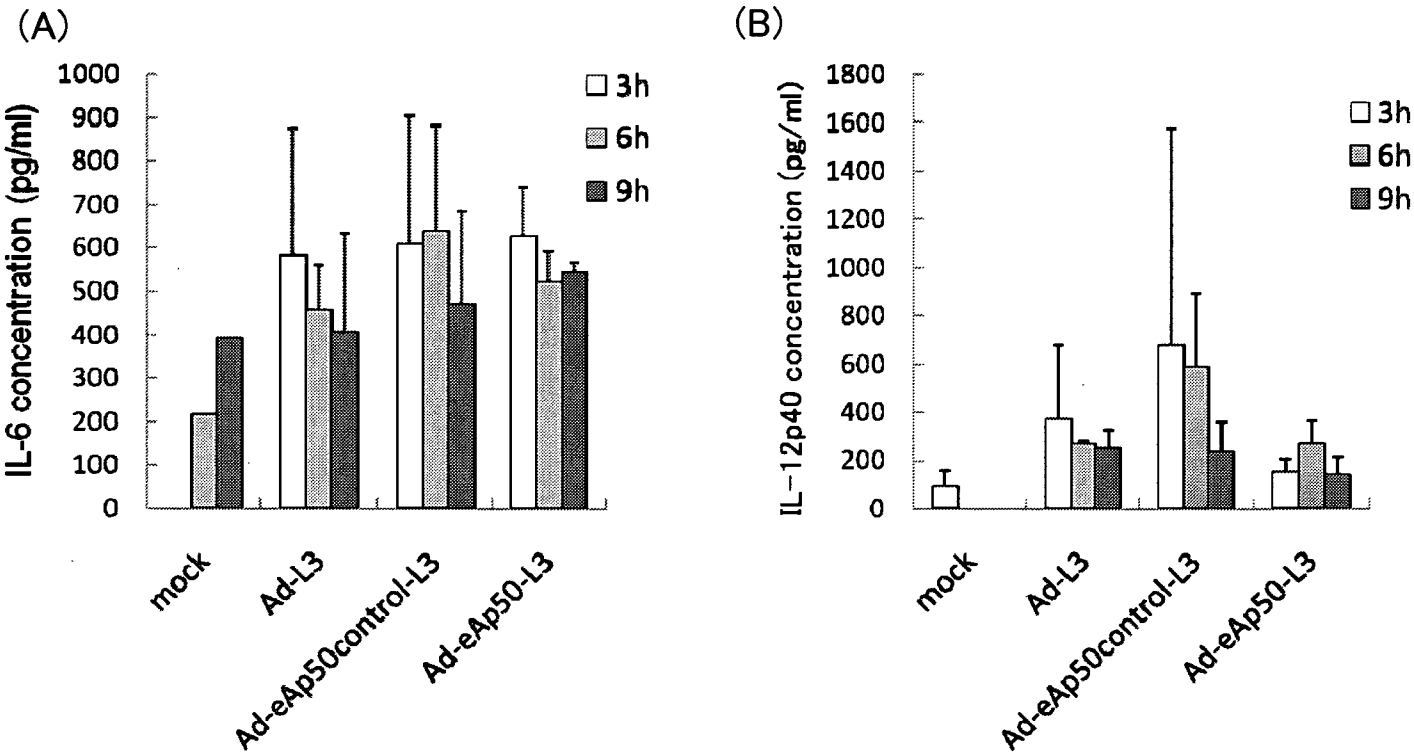


Fig. 36 Induction of various inflammatory cytokines by intravenous injection of Ad vectors.

A final volume of 200 ml of Ad vectors (5×10^{10} VP/mouse) was injected intravenously into each mouse. After the indicated time had passed following the Ad injection, peripheral blood serum was collected, and the concentration of IL-6 (A) and IL-12 (B) were measured by ELISA. All data are expressed as mean ±S.D. of 3 mice per group.

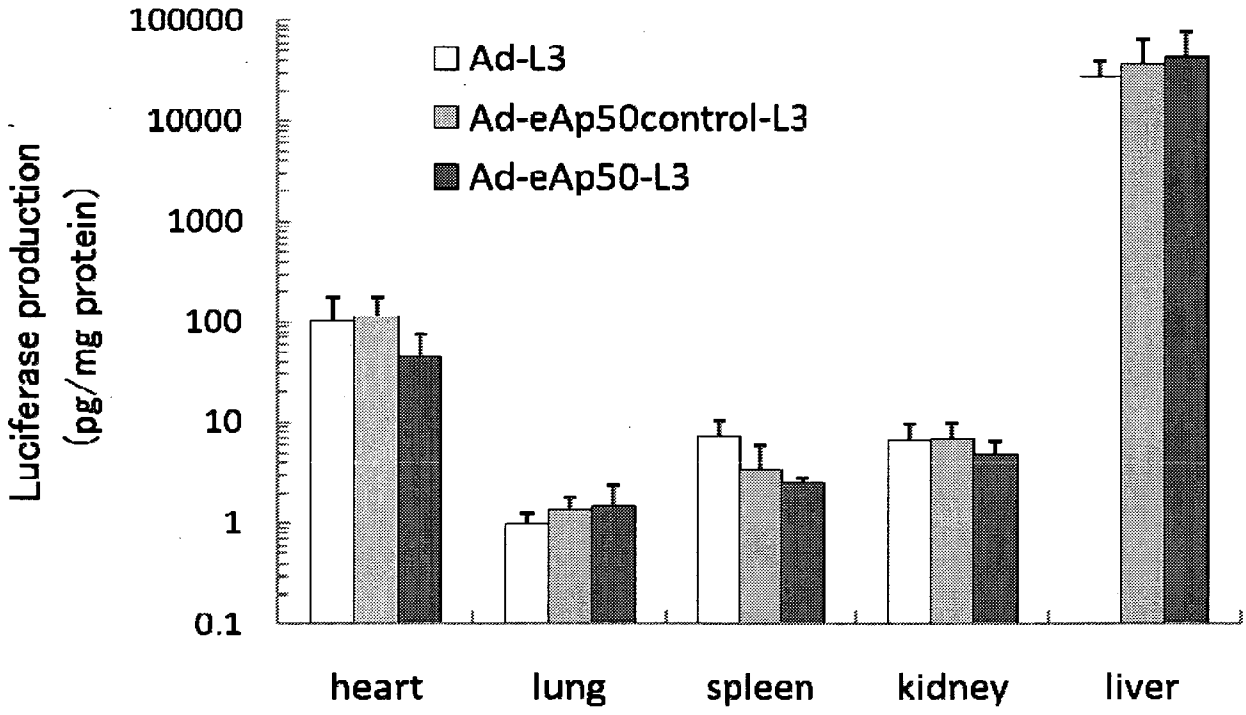


Fig. 37 Luciferase production in mice after intravenous administration of Ad vectors.

A final volume of 200 ml of Ad vectors (5×10^{10} VP/mouse) was injected intravenously into each mouse. After 48 h, each organs were harvested, and luciferase production and protein concentration were measured. All data are expressed as mean ±S.D. of 3 mice per group.

Table 1 Up-regulated genes stimulated with the conventional Ad vector in mouse peritoneal macrophages.

Affymetrix ID	Gene symbol	GenbankID	Gene name
1416953_at	Ctgf	NM_010217	connective tissue growth factor
1417061_at	Slc40a1	AF226613	solute carrier family 40 (iron-regulated transporter), member 1
1417262_at	Ptgs2	M94967	prostaglandin-endoperoxide synthase 2
1418714_at	Dusp8	NM_008748	dual specificity phosphatase 8
1418930_at	Cxcl10	NM_021274	chemokine (C-X-C motif) ligand 10
1421008_at	Rsad2	BB741897	radical S-adenosyl methionine domain containing 2
1421009_at	Rsad2	BB741897	radical S-adenosyl methionine domain containing 2
1421578_at	Ccl4	AF128218	chemokine (C-C motif) ligand 4
1422053_at	Inhba	NM_008380	inhibin beta-A
1422311_a_at	Polr2a	NM_009089	polymerase (RNA) II (DNA directed) polypeptide A
1423252_at	Hdgfrp3	BB291880	hepatoma-derived growth factor, related protein 3
1423620_at	2610528M18Rik	AI891882	RIKEN cDNA 2610528M18 gene
1424339_at	Oasl1	AB067533	2'-5' oligoadenylate synthetase-like 1
1426065_a_at	Trib3	BC012955	tribbles homolog 3 (Drosophila)
1426208_x_at	Plagl1	AF147785	pleiomorphic adenoma gene-like 1
1427381_at	Irg1	L38281	immunoresponsive gene 1
1431153_at	Nrxn3	BB646885	Neurexin III, mRNA (cDNA clone MGC:67582 IMAGE:6406001)
1431591_s_at	G1p2	AK019325	interferon, alpha-inducible protein
1433334_at	1700024P12Rik	AK006313	RIKEN cDNA 1700024P12 gene
1433836_a_at	8430408G22Rik	AV365503	RIKEN cDNA 8430408G22 gene
1434287_at	Agpat5	BG065500	1-acylglycerol-3-phosphate O-acyltransferase 5
1434771_at	0610011F06Rik	BG070867	RIKEN cDNA 0610011F06 gene
1436058_at	Rsad2	BB132493	radical S-adenosyl methionine domain containing 2
1438511_a_at	1190002H23Rik	BB408123	RIKEN cDNA 1190002H23 gene
1440814_x_at	Hs3st2	BB267880	heparan sulfate (glucosamine) 3-O-sulfotransferase 2
1441786_at	---	AW048005	Transcribed locus
1443670_at	2010001J22Rik	AI451392	RIKEN cDNA 2010001J22 gene
1447668_x_at	Efemp2	BB472459	epidermal growth factor-containing fibulin-like extracellular matrix protein 2
1448566_at	Slc40a1	AF226613	solute carrier family 40 (iron-regulated transporter), member 1
1449025_at	Ifit3	NM_010501	interferon-induced protein with tetratricopeptide repeats 3
1449317_at	Cflar	NM_009805	CASP8 and FADD-like apoptosis regulator
1449984_at	Cxcl2	NM_009140	chemokine (C-X-C motif) ligand 2
1450484_a_at	Tyki	AK004595	thymidylate kinase family LPS-inducible member
1450498_at	Mthfr	BB586520	5,10-methylenetetrahydrofolate reductase
1450783_at	Ifit1	NM_008331	interferon-induced protein with tetratricopeptide repeats 1
1452278_a_at	Hace1	BG922448	HECT domain and ankyrin repeat containing, E3 ubiquitin protein ligase 1
1453409_at	Cgrrf1	AK004156	cell growth regulator with ring finger domain 1
1455324_at	LOC433022	BQ176176	hypothetical LOC433022
1456186_at	---	AV261345	Transcribed locus
1459818_x_at	Zfp261	BB527320	zinc finger protein 261
1460067_at	Ccr2	BB324415	chemokine (C-C motif) receptor 2

Table 2 Up-regulated genes stimulated with RGD-type Ad vector in mouse peritoneal macrophages.

Affymetrix ID	Gene symbol	GenbankID	Gene name
1415922_s_at	Marcksl1	NM_010807	MARCKS-like 1
1416067_at	Ifrd1	NM_013562	interferon-related developmental regulator 1
1416268_at	Ets2	BC005486	E26 avian leukemia oncogene 2, 3' domain
1416700_at	Rnd3	BC009002	Rho family GTPase 3
1417371_at	Peli1	BC016515	pellino 1
1417372_a_at	Peli1	BC016515	pellino 1
1418126_at	Ccl5	NM_013653	chemokine (C-C motif) ligand 5
1418293_at	Ifit2	NM_008332	interferon-induced protein with tetratricopeptide repeats 2
1418930_at	Cxcl10	NM_021274	chemokine (C-X-C motif) ligand 10
1418936_at	Maff	BC022952	v-maf musculoaponeurotic fibrosarcoma oncogene family, protein F
1419132_at	Tlr2	NM_011905	toll-like receptor 2
1419561_at	Ccl3	NM_011337	chemokine (C-C motif) ligand 3
1419607_at	Tnf	NM_013693	tumor necrosis factor
1419676_at	Mx2	BC007127	myxovirus (influenza virus) resistance 2
1419879_s_at	Trim25	AA960166	tripartite motif protein 25
1420330_at	Clec4e	NM_019948	C-type lectin domain family 4, member e
1420376_a_at	H3f3b	NM_008211	H3 histone, family 3B
1421008_at	Rsad2	BB741897	radical S-adenosyl methionine domain containing 2
1421009_at	Rsad2	BB741897	radical S-adenosyl methionine domain containing 2
1421269_at	Ugcg	AA591863	UDP-glucose ceramide glucosyltransferase
1421578_at	Ccl4	AF128218	chemokine (C-C motif) ligand 4
1421640_a_at	Tank	NM_011529	TRAF family member-associated Nf-kappa B activator
1422095_a_at	Tyki	AK004595	thymidylate kinase family LPS-inducible member
1422305_at	Ifnb1	NM_010510	interferon beta 1, fibroblast
1423605_a_at	Mdm2	AK004719	transformed mouse 3T3 cell double minute 2
1424067_at	Icam1	BC008626	intercellular adhesion molecule
1424339_at	Oasl1	AB067533	2'-5' oligoadenylate synthetase-like 1
1425974_a_at	Trim25	D63902	tripartite motif protein 25
1426063_a_at	Gem	U10551	GTP binding protein (gene overexpressed in skeletal muscle)
1426208_x_at	Plagl1	AF147785	pleiomorphic adenoma gene-like 1
1426276_at	Ifih1	AY075132	interferon induced with helicase C domain 1
1426721_s_at	Tiparp	BB707122	TCDD-inducible poly(ADP-ribose) polymerase
1427005_at	Plk2	BM234765	polo-like kinase 2 (Drosophila)
1427381_at	Irg1	L38281	immunoresponsive gene 1
1427718_a_at	Mdm2	X58876	transformed mouse 3T3 cell double minute 2
1427736_a_at	Ccrl2	AJ318863	chemokine (C-C motif) receptor-like 2
1428750_at	Cdc42ep2	BF453885	CDC42 effector protein (Rho GTPase binding) 2
1429060_at	Malat1	AK020483	metastasis associated lung adenocarcinoma transcript 1
1431591_s_at	G1p2	AK019325	interferon, alpha-inducible protein
1433699_at	Tnfaip3	BM241351	tumor necrosis factor, alpha-induced protein 3
1434070_at	Jag1	AV359819	jagged 1
1434401_at	Zcchc2	BM224914	zinc finger, CCHC domain containing 2
1435133_at	Ugcg	BF682223	UDP-glucose ceramide glucosyltransferase
1435458_at	Pim1	AI323550	proviral integration site 1
1436058_at	Rsad2	BB132493	radical S-adenosyl methionine domain containing 2
1436080_at	AW011738	BB528213	expressed sequence AW011738
1436202_at	Malat1	AI853644	metastasis associated lung adenocarcinoma transcript 1
1438157_s_at	Nfkbia	BB096843	nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha
1447685_x_at	Ets2	BB416434	E26 avian leukemia oncogene 2, 3' domain
1448830_at	Dusp1	NM_013642	dual specificity phosphatase 1
1449025_at	Ifit3	NM_010501	interferon-induced protein with tetratricopeptide repeats 3
1449134_s_at	Spic	NM_011461	Spi-C transcription factor (Spi-1/PU.1 related)
1449317_at	Cflar	NM_009805	CASP8 and FADD-like apoptosis regulator
1449984_at	Cxcl2	NM_009140	chemokine (C-X-C motif) ligand 2
1450165_at	Slfn2	NM_011408	schlafen 2
1450484_a_at	Tyki	AK004595	thymidylate kinase family LPS-inducible member
1450783_at	Ifit1	NM_008331	interferon-induced protein with tetratricopeptide repeats 1
1451567_a_at	Ifi203	BC008167	interferon activated gene 203
1452534_a_at	Hmgb2	X67668	high mobility group box 2
1453119_at	Otud1	BB530087	OTU domain containing 1
1454617_at	Arrdc3	BG072824	arrestin domain containing 3
1454742_at	Rasgef1b	BB003229	RasGEF domain family, member 1B