

Fig1-III-2-19 第 17 番染色体

Scatter Plot (direct) *Alh2* genotype 曝露前後比較

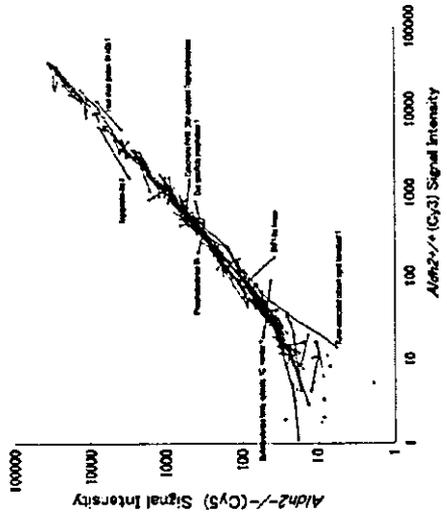


Fig1-III-2-21 第 19 番染色体

Scatter Plot (direct) *Alh2* genotype 曝露前後比較

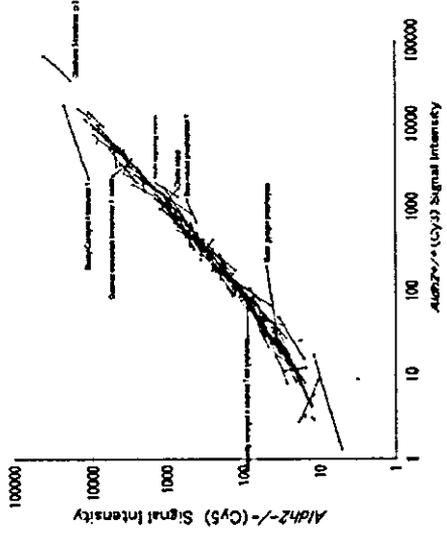
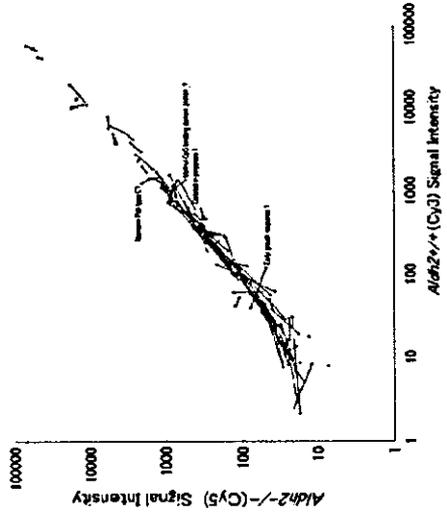


Fig1-III-2-20 第 18 番染色体

Scatter Plot (direct) *Alh2* genotype 曝露前後比較



解析法3 機能別の表示
Fig1-III-3-1 Apoptosis に関する遺伝子

Scatter Plot (direct) *Aldh2* genotype 曝露前後比較

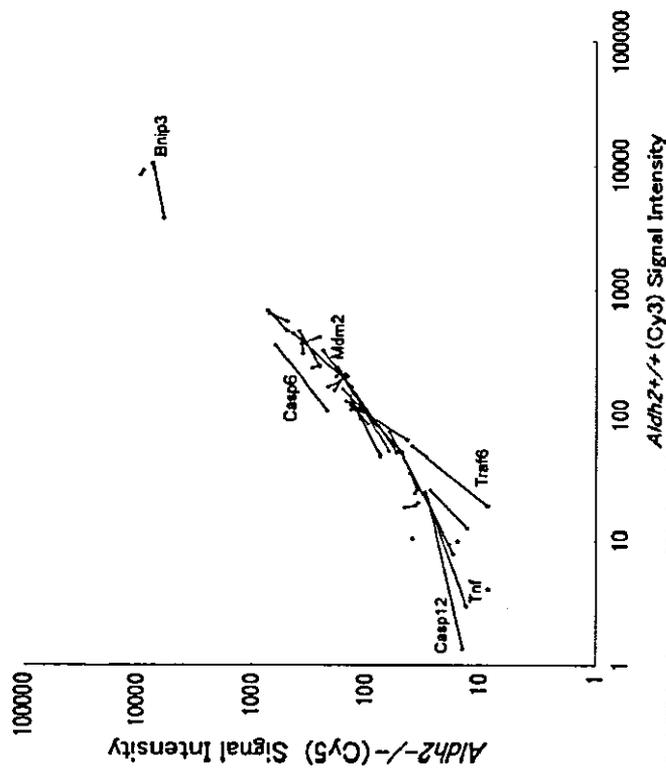


Table 1-III-3-1 Apoptosis に関する遺伝子

Gene Bank	Description	Gene Name
NM_007499	Ataxia telangiectasia mutated homolog (human)	Atm
NM_007465	Baculoviral IAP repeat-containing 2	Birc2
NM_007464	Baculoviral IAP repeat-containing 3	Birc3
NM_009740	B-cell leukemia/lymphoma 10	Bcl10
NM_009741	B-cell leukemia/lymphoma 2	Bcl2
NM_009760	BCL2adenovirus E1B 19kDa-interacting protein 1, NIP3	Bnip3
NM_007527	Bcl2-associated X protein	Bax
NM_009743	Bcl2-like 1	Bcl2l1
NM_009850	CASP2 and RIPK1 domain containing adaptor with death domain	Cradd
NM_009807	Caspase 1	Casp1
NM_009808	Caspase 12	Casp12
NM_007610	Caspase 2	Casp2
NM_009810	Caspase 3, apoptosis related cysteine protease	Casp3

NM_009811	Caspase 6	Casp6
NM_007611	Caspase 7	Casp7
NM_011997	Caspase 8 associated protein 2	Casp8ap2
NM_015733	Caspase 9	Casp9
NM_009894	Cell death-inducing DNA fragmentation factor, alpha subunit-like effector B	Cideb
NM_007859	DNA fragmentation factor, beta subunit	Dffb
NM_008316	Hus1 homolog (S. pombe)	Hus1
NM_010736	Lympholoxin B receptor	Libr
NM_008562	Myeloid cell leukemia sequence 1	Mcl1
NM_009068	Receptor (TNFRSF)-interacting serine-threonine kinase 1	Ripk1
NM_009423	Tnfr receptor associated factor 4	Traf4
NM_009421	Tnfr receptor-associated factor 1	Traf1
NM_011632	Tnfr receptor-associated factor 3	Traf3
NM_009424	Tnfr receptor-associated factor 6	Traf6
NM_011529	TRAF family member-associated NF-kappa B activator	Tank
NM_011640	Transformation related protein 53	Trp53
NM_010786	Transformed mouse 3T3 cell double minute 2	Mdm2
NM_013693	Tumor necrosis factor	Tnf
NM_011613	Tumor necrosis factor (ligand) superfamily, member 11	Tnfrsf11
NM_023517	Tumor necrosis factor (ligand) superfamily, member 13	Tnfrsf13
NM_009403	Tumor necrosis factor (ligand) superfamily, member 8	Tnfrsf8
NM_008764	Tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)	Tnfrsf11b
NM_011659	Tumor necrosis factor receptor superfamily, member 4	Tnfrsf4

Fig 1-III-3-2 DNA Damage Signaling に関係する遺伝子
Scatter Plot (direct) Aldh2 genotype 曝露前後比較

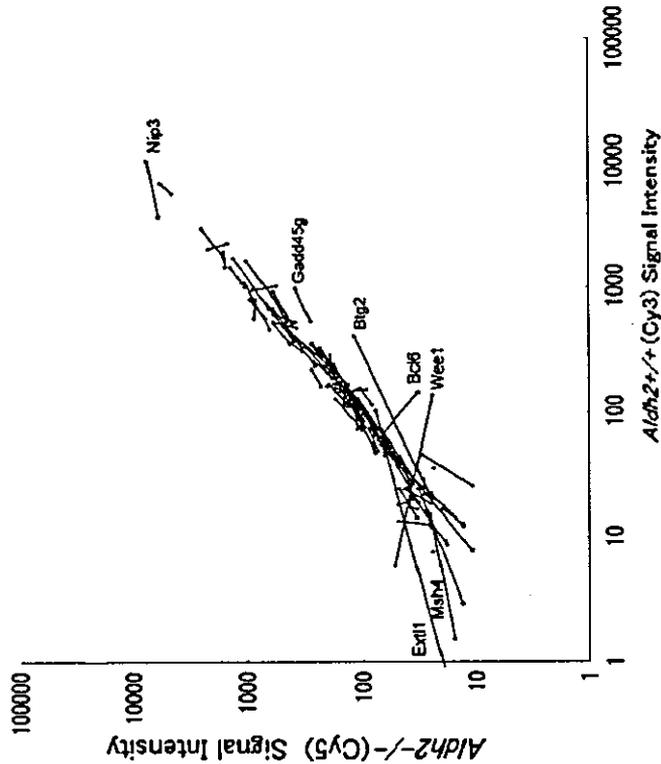


Table 1-III-3-2 DNA Damage Signaling に関係する遺伝子

Gene Bank Accession	Description	Gene Name
NM_009530	Alpha thalassemia/mental retardation syndrome X-linked homolog (human)	Atrx
NM_009687	Apurinic/apyrimidinic endonuclease 1	Ref-1
NM_007499	Ataxia telangiectasia mutated homolog (human)	Atm
NM_007484	Baculoviral IAP repeat-containing 3	Irp1
NM_007465	Baculoviral IAP repeat-containing 2	Irp2
NM_009744	B-cell leukemia/lymphoma 6	Bcl6
NM_007570	B-cell translocation gene 2, anti-proliferative	Big2
NM_018787	BCL2/adenovirus E1B 19kDa-interacting protein 1, NIP2	Nip2
NM_009760	BCL2/adenovirus E1B 19kDa-interacting protein 1, NIP3	Nip3
NM_007527	Bcl2-associated X protein	Bax
NM_009765	Breast cancer 2	Brc2
NM_007660	Cell division cycle 2 homolog (S. pombe)-like 2	Cdc22
NM_023223	Cell division cycle 20 homolog (S. cerevisiae)	Cdc20

NM_023117	Cell division cycle 25 homolog B (S. cerevisiae)	Cdc25B
NM_016742	Cell division cycle 37 homolog (S. cerevisiae)	Cdc37
NM_025950	Cell division cycle 37 homolog (S. cerevisiae)-like	Cdc371i
NM_009861	Cell division cycle 42 homolog (S. cerevisiae)	Cdc42
NM_009862	Cell division cycle 45 homolog (S. cerevisiae)-like	Cdc451i
NM_009863	Cell division cycle 71 homolog (S. cerevisiae)-like 1	Cdc711i
NM_009870	Cyclin-dependent kinase 4	Cdk 4
NM_009871	Cyclin-dependent kinase 5, regulatory subunit (p35)	Cdk5r1
NM_009875	Cyclin-dependent kinase inhibitor 1B (P27)	Cdkn1b
NM_009876	Cyclin-dependent kinase inhibitor 1C (P57)	Cdkn1c
NM_008878	Cyclin-dependent kinase inhibitor 2D (p18, inhibits CDK4)	Cdkn2d
NM_016812	Cyclin-dependent kinase-like 2 (CDC2-related kinase)	Cdkl2
NM_015735	Damage specific DNA binding protein 1 (127 kDa)	Ddb1
NM_007837	DNA-damage inducible transcript 3	Gadd153
NM_007948	Excision repair cross-complementing rodent repair deficiency, complementation group 1	Erc1
NM_015789	Excision repair cross-complementing rodent repair deficiency, complementation group 4	Xpf
NM_011729	Excision repair cross-complementing rodent repair deficiency, complementation group 5	Xpg
NM_010182	Exostoses (multiple) 1	Exf1
NM_010183	Exostoses (multiple) 2	Exf2
NM_019578	Exostoses (multiple)-like 1	Exf1l
NM_021988	Exostoses (multiple)-like 2	Exf2l
NM_007999	Flap structure specific endonuclease 1	Fen-1
NM_010446	Forkhead box A2	Foxa2
NM_008280	Forkhead box A3	Foxa3
NM_013519	Forkhead box C2	Foxc2
NM_010426	Forkhead box F1a	Foxf1a
NM_008241	Forkhead box G1	Foxg1
NM_008021	Forkhead box M1	Foxm1
NM_053202	Forkhead box P1	Foxp1
NM_007836	Growth arrest and DNA-damage-inducible 45 alpha	Gadd45
NM_008655	Growth arrest and DNA-damage-inducible 45 beta	Gadd45b
NM_011817	Growth arrest and DNA-damage-inducible 45 gamma	Gadd45g
NM_008086	Growth/arrest specific 1	Gas1
NM_018855	Growth arrest specific 11	Gas11
NM_008087	Growth arrest specific 2	Gas2
NM_013525	Growth arrest specific 5	Gas5
NM_018921	Growth arrest specific 6	Gas6
NM_008088	Growth arrest specific 7	Gas7
NM_010436	H2A histone family, member X	H2ahx
NM_016750	H2A histone family, member Z	H2alz
NM_008316	Hus1 homolog (S. pombe)	Hus1
NM_010823	Kinesin family member 17	Kif17
NM_008440	Kinesin family member 1A	Kif1a
NM_008442	Kinesin family member 2	Kif2
NM_016705	Kinesin family member 21A	Kif21a
NM_008443	Kinesin family member 3A	Kif3a

NM_008444	Kinesin family member 3B	Kif3b
NM_008445	Kinesin family member 3C	Kif3c
NM_008447	Kinesin family member 5A	Kif5a
NM_008448	Kinesin family member 5B	Kif5b
NM_010628	Kinesin family member 9	Kif9
NM_010630	Kinesin family member C2	kifc2
NM_011175	Lcpumain	Lcpumain
NM_010715	Ligase I, DNA, ATP-dependent	Lig1
NM_010716	Ligase III, DNA, ATP-dependent	Lig3
NM_008628	MutS homolog 2 (E. coli)	Msh2
NM_010829	MutS homolog 3 (E. coli)	Msh3
NM_031870	MutS homolog 4 (E. coli)	Msh4
NM_010830	MutS homolog 6 (E. coli)	Msh6
NM_013752	Nibrin	Nbs1
NM_011045	Proliferating cell nuclear antigen	Pcna
NM_023371	Protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1	Pin1
NM_016810	Protein phosphatase 1D magnesium-dependent, delta isoform	Wip1
NM_008889	Purine rich element binding protein A	Pura
NM_011221	Purine rich element binding protein B	Purb
NM_011232	RAD1 homolog (S. pombe)	Rad1
NM_011233	RAD17 homolog (S. pombe)	Rad17
NM_009009	RAD21 homolog (S. pombe)	Rad21
NM_009010	RAD23a homolog (S. cerevisiae)	Rad23a
NM_053269	Rad51 homolog c (S. cerevisiae)	Rad51c
NM_011235	RAD51-like 3 (S. cerevisiae)	Rad523
NM_011236	RAD52 homolog (S. cerevisiae)	Rad52
NM_026653	Replication protein A1 (70 kDa)	Rpa1
NM_011284	Replication protein A2	Rpa2
NM_009103	Ribonucleotide reductase M1	Rrm1
NM_011637	Three prime repair exonuclease 1	Trex1
NM_011640	Transformation related protein 53	p53
NM_010785	Transformed mouse 3T3 cell double minute 1	Mdm1
NM_010786	Transformed mouse 3T3 cell double minute 2	Mdm2
NM_013693	Tumor necrosis factor	Tnfa
NM_011613	Tumor necrosis factor (ligand) superfamily, member 11	Tnfrsf11
NM_023517	Tumor necrosis factor (ligand) superfamily, member 13	Tnfrsf13
NM_009403	Tumor necrosis factor (ligand) superfamily, member 8	Tnfrsf8
NM_008764	Tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)	Tnfrsf11b
NM_026075	Tumor necrosis factor receptor superfamily, member 13c	Tnfrsf13c
NM_011608	Tumor necrosis factor receptor superfamily, member 17	Tnfrsf17
NM_013869	Tumor necrosis factor receptor superfamily, member 19	Tnfrsf19
NM_052975	Tumor necrosis factor receptor superfamily, member 21	Tnfrsf21
NM_011659	Tumor necrosis factor receptor superfamily, member 4	Ox40
NM_009516	Wee 1 homolog (S. pombe)	Wee1
NM_011728	Xeroderma pigmentosum, complementation group A	Xpa
NM_009531	Xeroderma pigmentosum, complementation group C	Xpc

Fig 1-III-3-3 Cell Cycle に関与する遺伝子

Scatter Plot (direct) Aldh2 genotype 曝露前後比較

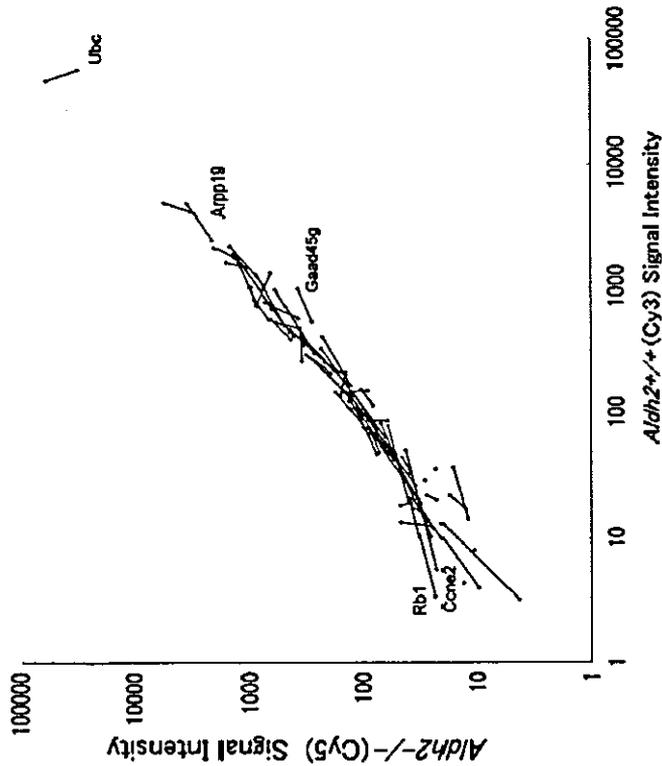


Table 1-III-3-3 Cell Cycle に関与する遺伝子

Gene Bank Accession	Description	Gene Name
NM_007499	Ataxia telangiectasia mutated homolog (human)	Atm
NM_009741	B-cell leukemia/lymphoma 2	Bcl2
NM_007527	Bcl2-associated X protein	Bax
NM_009765	Breast cancer 2	Brc2
NM_023223	Cell division cycle 20 homolog (S. cerevisiae)	Cdc20
NM_023117	Cell division cycle 25 homolog B (S. cerevisiae)	Cdc25b
NM_016742	Cell division cycle 37 homolog (S. cerevisiae)	Cdc37
NM_009862	Cell division cycle 45 homolog (S. cerevisiae)-like	Cdc45l
NM_016716	Cullin 3	Cul3
NM_028288	Cullin 4B	Cul4b
NM_021548	Cyclic AMP phosphoprotein, 19 kDa	App19
NM_007724	Cyclic nucleotide gated channel alpha 2	Cnga2
NM_009923	Cyclic nucleotide phosphodiesterase 1	Cnp1

NM_009828	Cyclin A2	Ccn2
NM_016746	Cyclin C	Cnc
NM_011806	Cyclin D binding myb-like transcription factor 1	Dmif1
NM_007631	Cyclin D1	Cnd1
NM_009829	Cyclin D2	Cnd2
NM_007632	Cyclin D3	Cnd3
NM_009830	Cyclin E2	Cce2
NM_009831	Cyclin G1	Ccg1
NM_023243	Cyclin H	Cch
NM_017367	Cyclin I	Cci
NM_019937	Cyclin L	Ccl
NM_009870	Cyclin-dependent kinase 4	Cdk4
NM_009871	Cyclin-dependent kinase 5, regulatory subunit (p35)	Cdk5r
NM_009875	Cyclin-dependent kinase inhibitor 1B (P27)	Cdkn1b
NM_009876	Cyclin-dependent kinase inhibitor 1C (P57)	Cdkn1c
NM_009878	Cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	Cdkn2d
NM_016912	Cyclin-dependent kinase-like 2 (CDC2-related kinase)	Cdkn2
NM_007891	E2F transcription factor 1	E2f1
NM_007892	E2F transcription factor 5	E2f5
NM_008021	Forkhead box M1	Foxm1
NM_007836	Growth arrest and DNA-damage-inducible 45 alpha	Gadd45a
NM_008655	Growth arrest and DNA-damage-inducible 45 beta	Gadd45b
NM_011817	Growth arrest and DNA-damage-inducible 45 gamma	Gadd45g
NM_008316	Hus1 homolog (S. pombe)	Hus1
NM_008564	Mini chromosome maintenance deficient 2 (S. cerevisiae)	Mcm2
NM_008567	Mini chromosome maintenance deficient 6 (S. cerevisiae)	Mcm6
NM_008568	Mini chromosome maintenance deficient 7 (S. cerevisiae)	Mcm7
NM_008682	Neural precursor cell expressed, developmentally down-regulated gene 1	Nedd1
NM_031881	Neural precursor cell expressed, developmentally down-regulated gene 4-like	Nedd4l
NM_017464	Neural precursor cell expressed, developmentally down-regulated gene 9	Nedd9
NM_010890	Neural precursor cell expressed, developmentally down-regulated gene 4	Nedd4
NM_013752	Nibrin	Nbn
NM_010907	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	Nfkbia
NM_010908	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, beta	Nfkbib
NM_008690	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	Nfkbie
NM_010909	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 1	Nfkbil
NM_011045	Proliferating cell nuclear antigen	Pcna
NM_011232	RAD1 homolog (S. pombe)	Rad1
NM_011233	RAD17 homolog (S. pombe)	Rad17
NM_009009	RAD21 homolog (S. pombe)	Rad21
NM_009010	RAD23a homolog (S. cerevisiae)	Rad23a
NM_053269	Rad51 homolog c (S. cerevisiae)	Rad51
NM_011235	RAD51-like 3 (S. cerevisiae)	Rad51l3
NM_011236	RAD52 homolog (S. cerevisiae)	Rad52
NM_009065	Ras-like without CAAX 2	Rli2
NM_026653	Replication protein A1 (70 kDa)	Rpa1

NM_011284	Replication protein A2	Rpa2
NM_009029	Retinoblastoma 1	Rb1
NM_019712	Ring-box 1	Rbx1
NM_019929	SMT3 (suppressor of mit. two. 3) homolog 1 (S. cerevisiae)	Sumo3
NM_013787	S-phase kinase-associated protein 2 (p45)	Skp2
NM_011594	Tissue inhibitor of metalloproteinase 2	Timp2
NM_011595	Tissue inhibitor of metalloproteinase 3	Timp3
NM_080639	Tissue inhibitor of metalloproteinase 4	Timp4
NM_009361	Transcription factor Dp 1	Tfdp1
NM_011640	Transformation related protein 53	Trp53
NM_010766	Transformed mouse 3T3 cell double minute 2	Mdm2
NM_009536	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon polypeptide	Ywhae
NM_019639	Ubiquitin C	Ubc

Fig 1-III-3-4 Stress Response および Cell Damage に関与する遺伝子
Scatter Plot (direct) Aldh2 genotype 曝露前後比較

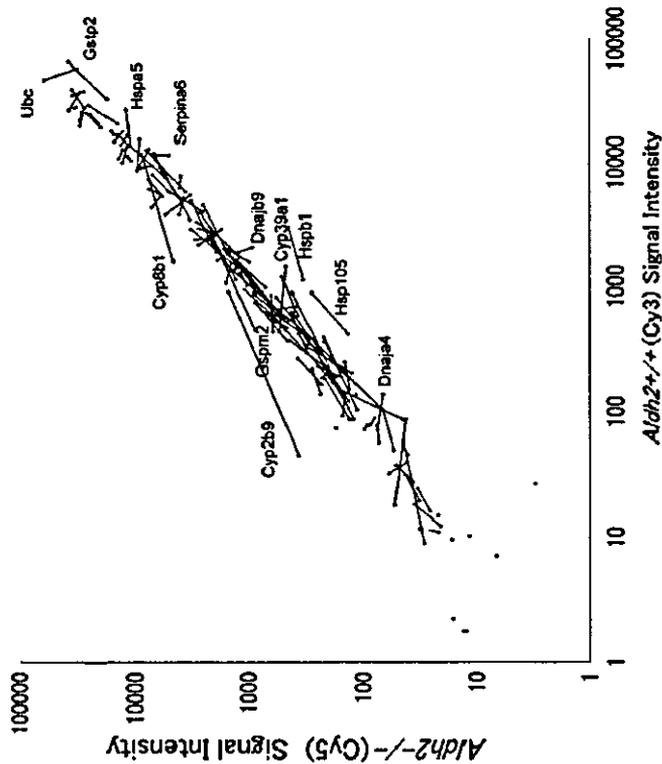


Table 1-III-3-4 Stress Response および Cell Damage に関与する遺伝子

Gene Bank Accession	Description	Gene name
NM_007381	Acetyl-Coenzyme A dehydrogenase, long-chain	Acadl
NM_007382	Acetyl-Coenzyme A dehydrogenase, medium chain	Acadm
NM_007383	Acetyl-Coenzyme A dehydrogenase, short chain	Acads
NM_019811	Acetyl-Coenzyme A synthetase 2 (ADP forming)	Acas2
NM_080575	Acetyl-Coenzyme A synthetase 2 (AMP forming)-like	Acas2l
NM_009736	BCI2-associated athanogene 1	Bag1
NM_026121	BCI2-associated athanogene 4	Bag4
NM_009787	Calcium binding protein, intestinal	Cal
NM_007597	Calnexin	Canx
NM_021456	Carboxylesterase 1	Ces1
NM_053200	Carboxylesterase 3	Ces3
NM_009804	Catalase 1	Cat
NM_007636	Chaperonin subunit 2 (beta)	Cct2
NM_009836	Chaperonin subunit 3 (gamma)	Cct3

NM_009837	Chaperonin subunit 4 (delta)	Cct4
NM_007637	Chaperonin subunit 5 (epsilon)	Cct5
NM_009838	Chaperonin subunit 6a (zeta)	Cct6a
NM_009839	Chaperonin subunit 6b (zeta)	Cct6b
NM_007638	Chaperonin subunit 7 (eta)	Cct7
NM_009840	Chaperonin subunit 8 (theta)	Cct8
NM_013492	Clusterin	Clu
NM_130882	Cytochrome P450 CYP4F13	Cyp4f13
NM_019779	Cytochrome P450, 11a, cholesterol side chain cleavage	Cyp11a1
NM_009993	Cytochrome P450, 1a2, aromatic compound inducible	Cyp1a2
NM_133657	Cytochrome P450, 2a12	Cyp2a12
NM_009998	Cytochrome P450, 2b10, phenobarbital inducible, type b	Cyp2b10
NM_010000	Cytochrome P450, 2b9, phenobarbital inducible, type a	Cyp2b9
NM_010003	Cytochrome P450, 2c39	Cyp2c39
NM_010004	Cytochrome P450, 2c40	Cyp2c40
NM_010005	Cytochrome P450, 2d10	Cyp2d10
NM_019823	Cytochrome P450, 2d22	Cyp2d22
NM_021282	Cytochrome P450, 2e1, ethanol inducible	Cyp2e1
NM_007817	Cytochrome P450, 2f2	Cyp2f2
NM_013909	Cytochrome P450, 2g1	Cyp2g1
NM_010007	Cytochrome P450, 2j5	Cyp2j5
NM_010008	Cytochrome P450, 2j6	Cyp2j6
NM_018887	Cytochrome P450, 39a1 (oxysterol 7alpha-hydroxylase)	Cyp39a1
NM_007820	Cytochrome P450, 3a16	Cyp3a16
NM_010010	Cytochrome P450, 4b, subfamily a, polypeptide 1	Cyp4ba1
NM_020010	Cytochrome P450, 51	Cyp51
NM_007824	Cytochrome P450, 7a1	Cyp7a1
NM_007825	Cytochrome P450, 7b1	Cyp7b1
NM_010012	Cytochrome P450, 8b1, sterol 12 alpha-hydroxylase	Cyp8b1
NM_017396	Cytochrome P450, steroid inducible 3a41	Cyp3a41
NM_007823	Cytochrome P450, subfamily IV B, polypeptide 1	Cyp4b1
NM_022434	Cytochrome P450, subfamily IVF, polypeptide 14 (leukotriene B4 omega hydroxylase)	Cyp4f14
NM_029787	Dipeptidase 1 (NADH)	Dia1
NM_008298	DnaJ (Hsp40) homolog, subfamily A, member 1	Dnaj1
NM_019794	DnaJ (Hsp40) homolog, subfamily A, member 2	Dnaj2
NM_023646	DnaJ (Hsp40) homolog, subfamily A, member 3	Dnaj3
NM_021422	DnaJ (Hsp40) homolog, subfamily A, member 4	Dnaj4
NM_018808	DnaJ (Hsp40) homolog, subfamily B, member 1	Dnajb1
NM_020268	DnaJ (Hsp40) homolog, subfamily B, member 10	Dnajb10
NM_026400	DnaJ (Hsp40) homolog, subfamily B, member 11	Dnajb11
NM_019965	DnaJ (Hsp40) homolog, subfamily B, member 12	Dnajb12
NM_011847	DnaJ (Hsp40) homolog, subfamily B, member 6	Dnajb6
NM_021317	DnaJ (Hsp40) homolog, subfamily B, member 7	Dnajb7
NM_019964	DnaJ (Hsp40) homolog, subfamily B, member 8	Dnajb8
NM_013760	DnaJ (Hsp40) homolog, subfamily B, member 9	Dnajb9
NM_007869	DnaJ (Hsp40) homolog, subfamily C, member 1	Dnajc1

NM_008929	DnaJ (Hsp40) homolog, subfamily C, member 3	Dnajc3
NM_016775	DnaJ (Hsp40) homolog, subfamily C, member 5	Dnajc5
NM_019795	DnaJ (Hsp40) homolog, subfamily C, member 7	Dnajc7
NM_007940	Epoxide hydrolase 2, cytoplasmic	Eph2
NM_008030	Flavin containing monooxygenase 3	Fmo3
NM_007952	Glucose regulated protein, 58 kDa	Grp58
NM_008160	Glutathione peroxidase 1	Gpx1
NM_030577	Glutathione peroxidase 2	Gpx2
NM_008161	Glutathione peroxidase 3	Gpx3
NM_008162	Glutathione peroxidase 4	Gpx4
NM_010344	Glutathione reductase 1	Gsr
NM_008181	Glutathione S-transferase, alpha 1 (Ya)	Gsta1
NM_008183	Glutathione S-transferase, mu 2	Gstm2
NM_010360	Glutathione S-transferase, mu 5	Gstm5
NM_008184	Glutathione S-transferase, mu 6	Gstm6
NM_013541	Glutathione S-transferase, pi 2	Gstp2
NM_008180	Glutathione synthetase	Gss
NM_010363	Glutathione transferase zeta 1 (maleylacetate isomerase)	Gatz1
NM_008300	Heat shock 70 kDa protein 4	Hspa4
NM_022310	Heat shock 70 kDa protein 5 (glucose-regulated protein, 76kD)	Hspa5
NM_031165	Heat shock 70kD protein 8	Hspa8
NM_008297	Heat shock factor 2	Hsf2
NM_013868	Heat shock protein 25 kDa 2 (cardiovascular)	Hsp25
NM_013559	Heat shock protein, 105 kDa	Hsp105
NM_013560	Heat shock protein, 25 kDa	Hspb1
NM_019979	Heat shock protein, 30 kDa	Hsp32
NM_008301	Heat shock protein, 70 kDa 2	Hspa2
NM_015765	Heat shock protein, 70 kDa 4	Hspa14
NM_010481	Heat shock protein, 74 kDa, A	Hspa9a
NM_008302	Heat shock protein, 84 kDa 1	Hspcb
NM_010442	Heme oxygenase (decycling) 1	Hmox1
NM_010443	Heme oxygenase (decycling) 2	Hmox2
NM_019814	Hypoxia induced gene 1	Hig1
NM_010431	Hypoxia inducible factor 1, alpha subunit	Hif1a
NM_019946	Microsomal glutathione S-transferase 1	Mgst1
NM_019870	N-acetyltransferase ARD1 homolog (S. cerevisiae)	Ard1
NM_025539	Nudix (nucleoside diphosphate linked moiety X)-type motif 2	Nud2
NM_016918	Nudix (nucleoside diphosphate linked moiety X)-type motif 5	Nud5
NM_024437	Nudix (nucleoside diphosphate linked moiety X)-type motif 7	Nud7
NM_011134	Paraoxonase 1	Pon1
NM_026352	Peptidylprolyl isomerase D (cyclophilin D)	Ppid
NM_009825	Serine (or cysteine) proteinase inhibitor, clade H, member 1	Serpinh1
NM_016737	Stress-induced phosphoprotein 1	Stip1
NM_019978	Sulfotransferase family 1B, member 1	Sult1b1
NM_013873	Sulfotransferase family 4A, member 1	Sult4a1
NM_026935	Sulfotransferase family, cytosolic, 1C, member 2	Sult1c1

NM_017465	Sulfotransferase family, cytosolic, 2B, member 1	Sult2b1
NM_019671	Superoxide dismutase 2, mitochondrial	Sod2
NM_011176	Suppression of tumorigenicity 14 (colon carcinoma)	St14
NM_022332	Suppression of tumorigenicity 7	St7
NM_013688	T-complex protein 1	Tcp1
NM_009340	T-complex protein 10a	Tcp10a
NM_011553	T-complex protein 10b	Tcp10b
NM_009341	T-complex protein 10c	Tcp10c
NM_013687	T-complex protein 11	Tcp11
NM_019768	Telomerase binding protein, p23	Tebp
NM_016785	Thiopurine methyltransferase	Tpmt
NM_011631	Tumor rejection antigen gp96	Tra1
NM_019639	Ubiquitin C	Ubc
NM_009467	UDP-glucuronosyltransferase 2 family, member 5	Ugt2b5
NM_011723	Xanthine dehydrogenase	Xdh

Fig 1-III-3-5 Stress, および薬物代謝に関与する遺伝子

Scatter Plot (direct) Aldh2 genotype 曝露前後比較

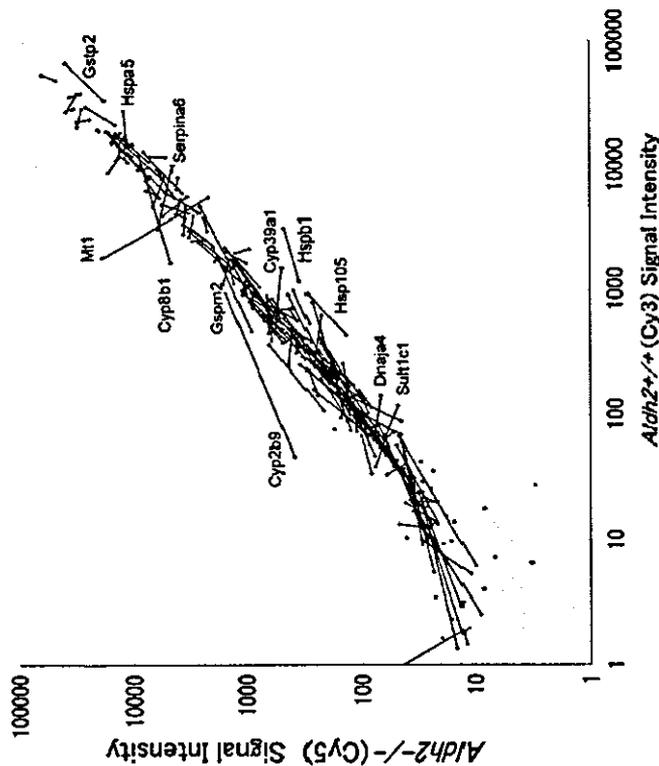


Table 1-III-3-5 Stress, および薬物代謝に関与する遺伝子

Gene Bank Accession	Description	Gene Name
NM_010730	Annexin A1	Anxa1
NM_013489	Annexin A11	Anxa11
NM_007585	Annexin A2	Anxa2
NM_009673	Annexin A5	Anxa5
NM_009674	Annexin A7	Anxa7
NM_007459	Alaxia telangiectasia mutated homolog (human)	Atm
NM_007527	Bcl2-associated X protein	Bax
NM_009743	Bcl2-like	Bcl2l1
NM_009807	Caspase 1	Casp1
NM_009808	Caspase 12	Casp12
NM_007610	Caspase 2	Casp2
NM_009810	Caspase 3, apoptosis related cysteine protease	Casp3

NM_009811	Caspase 6	Casp6
NM_007611	Caspase 7	Casp7
NM_011997	Caspase 8 associated protein 2	Casp8ap2
NM_015733	Caspase 9	Casp9
NM_011331	Chemokine (C-C motif) ligand 12	Ccl12
NM_011332	Chemokine (C-C motif) ligand 17	Ccl17
NM_011868	Chemokine (C-C motif) ligand 19	Ccl19
NM_016960	Chemokine (C-C motif) ligand 20	Ccl20
NM_009137	Chemokine (C-C motif) ligand 22	Ccl22
NM_019577	Chemokine (C-C motif) ligand 24	Ccl24
NM_009138	Chemokine (C-C motif) ligand 25	Ccl25
NM_013652	Chemokine (C-C motif) ligand 4	Ccl4
NM_013654	Chemokine (C-C motif) ligand 7	Ccl7
NM_021443	Chemokine (C-C motif) ligand 8	Ccl8
NM_009912	Chemokine (C-C motif) receptor 1	Ccr1
NM_009916	Chemokine (C-C motif) receptor 4	Ccr4
NM_009913	Chemokine (C-C motif) receptor 9	Ccr9
NM_017466	Chemokine (C-C motif) receptor-like 2	Ccr2
NM_009914	Chemokine (C-C) receptor 3	Ccr3
NM_013655	Chemokine (C-X-C motif) ligand 12	Cxcl12
NM_019568	Chemokine (C-X-C motif) ligand 14	Cxcl14
NM_011339	Chemokine (C-X-C motif) ligand 15	Cxcl15
NM_008599	Chemokine (C-X-C motif) ligand 9	Cxcl9
NM_009910	Chemokine (C-X-C motif) receptor 3	Cxcr3
NM_030712	Chemokine (C-X-C motif) receptor 6	Cxcr6
NM_007778	Colony stimulating factor 1 (macrophage)	Csf1
NM_007780	Colony stimulating factor 2 receptor, beta 1, low-affinity (granulocyte/macrophage)	Csf2rb1
NM_007781	Colony stimulating factor 2 receptor, beta 2, low-affinity (granulocyte/macrophage)	Csf2rb2
NM_009971	Colony stimulating factor 3 (granulocyte)	Csf3
NM_009964	Crystallin, alpha B	Cryab
NM_030704	Crystallin, alpha C	Cryac
NM_021541	Crystallin, beta A2	Cryba2
NM_030004	Crystallin, lambda 1	Cryl1
NM_016669	Crystallin, mu	Crym
NM_016746	Cyclin C	Ccnc
NM_011806	Cyclin D binding myb-like transcription factor 1	Dmif1
NM_007631	Cyclin D1	Ccnd1
NM_009829	Cyclin D2	Ccnd2
NM_007632	Cyclin D3	Ccnd3
NM_009830	Cyclin E2	Ccne2
NM_009831	Cyclin G	Ccng
NM_023243	Cyclin H	Ccnh
NM_017367	Cyclin I	Ccni
NM_019937	Cyclin L	Ccni1
NM_009870	Cyclin-dependent kinase 4	Cdk4
NM_009871	Cyclin-dependent kinase 5, regulatory subunit (p35)	Cdk5
NM_009875	Cyclin-dependent kinase inhibitor 1B (P27)	Cdk1b

NM_009876	Cyclin-dependent kinase inhibitor 1C (P57)	Cdk1c
NM_009878	Cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	Cdk2d
NM_016912	Cyclin-dependent kinase-like 2 (CDC2-related kinase)	Cdk2
NM_007807	Cytochrome b-245, beta polypeptide	Cybb
NM_025797	Cytochrome b-5	Cy5
NM_007805	Cytochrome b-561	Cy561
NM_009941	Cytochrome c oxidase subunit IV isoform 1	Cox4i1
NM_053091	Cytochrome c oxidase subunit IV isoform 2	Cox4i2
NM_007747	Cytochrome c oxidase subunit V isoform 1	Cox5i1
NM_009187	Cytochrome c oxidase subunit VIIa polypeptide 2-like	Cox7a2l
NM_025379	Cytochrome c oxidase subunit VIIb	Cox7b
NM_007748	Cytochrome c oxidase, subunit VI a, polypeptide 1	Cox6a1
NM_053071	Cytochrome c oxidase, subunit VI c	Cox6c
NM_009945	Cytochrome c oxidase, subunit VIIa 2	Cox7a2
NM_007750	Cytochrome c oxidase, subunit VIIa	Cox8a
NM_007808	Cytochrome c, somatic	Cytc
NM_009989	Cytochrome c, testis	Cytc
NM_130882	Cytochrome P450 CYP4F13	Cyp4f13
NM_019779	Cytochrome P450, 11a, cholesterol side chain cleavage	Cyp11a1
NM_010000	Cytochrome P450, 2b9, phenobarbital inducible, type a	Cyp2b9
NM_020010	Cytochrome P450, 51	Cyp51
NM_009993	Cytochrome P450, family 1, subfamily a, polypeptide 2	Cyp1a2
NM_133657	Cytochrome P450, family 2, subfamily a, polypeptide 12	Cyp2a12
NM_009998	Cytochrome P450, family 2, subfamily b, polypeptide 10	Cyp2b10
NM_010003	Cytochrome P450, family 2, subfamily c, polypeptide 39	Cyp2c39
NM_010004	Cytochrome P450, family 2, subfamily d, polypeptide 40	Cyp2d40
NM_010005	Cytochrome P450, family 2, subfamily d, polypeptide 10	Cyp2d10
NM_019823	Cytochrome P450, family 2, subfamily d, polypeptide 22	Cyp2d22
NM_021282	Cytochrome P450, family 2, subfamily e, polypeptide 1	Cyp2e1
NM_007817	Cytochrome P450, family 2, subfamily f, polypeptide 2	Cyp2f2
NM_013809	Cytochrome P450, family 2, subfamily g, polypeptide 1	Cyp2g1
NM_010007	Cytochrome P450, family 2, subfamily j, polypeptide 5	Cyp2j5
NM_010008	Cytochrome P450, family 2, subfamily j, polypeptide 6	Cyp2j6
NM_007820	Cytochrome P450, family 3, subfamily a, polypeptide 16	Cyp3a16
NM_017396	Cytochrome P450, family 3, subfamily a, polypeptide 41	Cyp3a41
NM_018887	Cytochrome P450, family 39, subfamily a, polypeptide 1	Cyp39a1
NM_007823	Cytochrome P450, family 4, subfamily b, polypeptide 1	Cyp4b1
NM_022434	Cytochrome P450, family 4, subfamily f, polypeptide 14	Cyp4f14
NM_010010	Cytochrome P450, family 46, subfamily a, polypeptide 1	Cyp46
NM_007824	Cytochrome P450, family 7, subfamily a, polypeptide 1	Cyp7a1
NM_007825	Cytochrome P450, family 7, subfamily b, polypeptide 1	Cyp7b1
NM_010012	Cytochrome P450, family 8, subfamily b, polypeptide 1	Cyp8b1
NM_007837	DNA-damage inducible transcript 3	Ddit3
NM_008298	DnaJ (Hsp40) homolog, subfamily A, member 1	DnaJ1
NM_019794	DnaJ (Hsp40) homolog, subfamily A, member 2	DnaJ2
NM_023646	DnaJ (Hsp40) homolog, subfamily A, member 3	DnaJ3

NM_021422	DnaJ (Hsp40) homolog, subfamily A, member 4	DnaJ4
NM_018808	DnaJ (Hsp40) homolog, subfamily B, member 1	DnaJ1
NM_020268	DnaJ (Hsp40) homolog, subfamily B, member 10	DnaJ10
NM_026400	DnaJ (Hsp40) homolog, subfamily B, member 11	DnaJ11
NM_019965	DnaJ (Hsp40) homolog, subfamily B, member 12	DnaJ12
NM_011847	DnaJ (Hsp40) homolog, subfamily B, member 6	DnaJ6
NM_021317	DnaJ (Hsp40) homolog, subfamily B, member 7	DnaJ7
NM_019964	DnaJ (Hsp40) homolog, subfamily B, member 8	DnaJ8
NM_013760	DnaJ (Hsp40) homolog, subfamily B, member 9	DnaJ9
NM_007869	DnaJ (Hsp40) homolog, subfamily C, member 1	DnaJc1
NM_008929	DnaJ (Hsp40) homolog, subfamily C, member 3	DnaJc3
NM_020568	DnaJ (Hsp40) homolog, subfamily C, member 4	DnaJc4
NM_016775	DnaJ (Hsp40) homolog, subfamily C, member 5	DnaJc5
NM_019795	DnaJ (Hsp40) homolog, subfamily C, member 7	DnaJc7
NM_007891	E2F transcription factor 1	E2f1
NM_007913	Early growth response 1	Egr1
NM_007940	Epoxide hydrolase 2, cytoplasmic	Ephx2
NM_008030	Flavin containing monooxygenase 3	Fmo3
NM_008160	Glutathione peroxidase 1	Gpx1
NM_030677	Glutathione peroxidase 2	Gpx2
NM_008161	Glutathione peroxidase 3	Gpx3
NM_008162	Glutathione peroxidase 4	Gpx4
NM_010344	Glutathione reductase 1	Gsr1
NM_008181	Glutathione S-transferase, alpha 1 (Ya)	Gsta1
NM_008183	Glutathione S-transferase, mu 2	Gstm2
NM_010360	Glutathione S-transferase, mu 5	Gstm5
NM_008184	Glutathione S-transferase, mu 6	Gstm6
NM_013541	Glutathione S-transferase, pi 2	Gstp2
NM_008180	Glutathione synthetase	Gss
NM_010363	Glutathione transferase zeta 1 (maleylacetoacetate isomerase)	Gz1z1
NM_007836	Growth arrest and DNA-damage-inducible 45 alpha	Gadd45a
NM_008655	Growth arrest and DNA-damage-inducible 45 beta	Gadd45b
NM_011817	Growth arrest and DNA-damage-inducible 45 gamma	Gadd45g
NM_008303	Heat shock 10 kDa protein 1 (chaperonin 10)	Hspa1
NM_053120	Heat shock 10 kDa protein 1 (chaperonin 10), pseudogene 2	Hspa1-ps2
NM_008300	Heat shock 70 kDa protein 4	Hsp4
NM_022310	Heat shock 70kD protein 5 (glucose-regulated protein, 78kD)	Hspa5
NM_031165	Heat shock 70kD protein 8	Hspa8
NM_008297	Heat shock factor 2	Hsf2
NM_013868	Heat shock protein 25 kDa 2 (cardiovascular)	Hsp25
NM_013559	Heat shock protein, 105 kDa	Hsp105
NM_013560	Heat shock protein, 25 kDa	Hsp21
NM_019979	Heat shock protein, 30 kDa	Hsi2
NM_008301	Heat shock protein, 70 kDa 2	Hspa2
NM_015765	Heat shock protein, 70 kDa 4	Hspa14
NM_010481	Heat shock protein, 74 kDa, A	Hspa9a

NM_008302	Heat shock protein, 84 kDa 1	Hspcb
NM_010442	Hemo oxygenase (deacyling) 1	Hmox1
NM_010443	Hemo oxygenase (deacyling) 2	Hmox2
NM_008342	Insulin-like growth factor binding protein 2	Igfbp2
NM_010517	Insulin-like growth factor binding protein 4	Igfbp4
NM_010518	Insulin-like growth factor binding protein 5	Igfbp5
NM_008344	Insulin-like growth factor binding protein 6	Igfbp6
NM_134103	Interleukin 1 receptor accessory protein	Il1rap
NM_010555	Interleukin 1 receptor, type II	Il1r2
NM_008349	Interleukin 10 receptor, beta	Il10r2
NM_008350	Interleukin 11	Il11
NM_010549	Interleukin 11 receptor, alpha chain 1	Il11ra1
NM_010550	Interleukin 11 receptor, alpha chain 2	Il11ra2
NM_008357	Interleukin 15	Il15
NM_008359	Interleukin 17 receptor	Il17r
NM_010531	Interleukin 18 binding protein	Il18bp
NM_021887	Interleukin 21 receptor	Il21r
NM_016971	Interleukin 22	Il22
NM_031252	Interleukin 23, alpha subunit p19	Il23a
NM_010557	Interleukin 4 receptor, alpha	Il4ra
NM_010561	Interleukin enhancer binding factor 3	Ilf3
NM_010798	Macrophage migration inhibitory factor	Mif
NM_013602	Metallothionein 1	Mt1
NM_010841	Metallothionein-like 5, testis-specific (testin)	Mt5
NM_008712	Nitric oxide synthase 1, neuronal	Nos1
NM_008713	Nitric oxide synthase 3, endothelial cell	Nos3
NM_008687	Nuclear factor I/B	Nf1b
NM_008688	Nuclear factor I/C	Nf1c
NM_010907	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	Nfkb1a
NM_010908	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, beta	Nfkb1b
NM_008690	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	Nfkb1e
NM_010909	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 1	Nfkb1l1
NM_008698	P450 (cytochrome) oxidoreductase	Por
NM_011045	Proliferating cell nuclear antigen	Pcna
NM_008969	Prostaglandin-endoperoxide synthase 1	Ptgs1
NM_011198	Prostaglandin-endoperoxide synthase 2	Ptgs2
NM_011232	RAD1 homolog (S. pombe)	Rad1
NM_011233	RAD17 homolog (S. pombe)	Rad17
NM_009009	RAD21 homolog (S. pombe)	Rad21
NM_009010	RAD23a homolog (S. cerevisiae)	Rad23a
NM_053269	Rad51 homolog c (S. cerevisiae)	Rad51
NM_011235	RAD51-like 3 (S. cerevisiae)	Rad51l3
NM_011236	RAD52 homolog (S. cerevisiae)	Rad52
NM_008458	Serine (or cysteine) proteinase inhibitor, clade A, member 3C	Serpina3c
NM_008785	Serine (or cysteine) proteinase inhibitor, clade A, member 5	Serpina5
NM_007618	Serine (or cysteine) proteinase inhibitor, clade A, member 6	Serpina6

NM_009254	Serine (or cysteine) proteinase inhibitor, clade B, member 6	Serpinb6
NM_027548	Serine (or cysteine) proteinase inhibitor, clade B, member 7	Serpinb7
NM_080844	Serine (or cysteine) proteinase inhibitor, clade C (antithrombin), member 1	Serpinc1
NM_009255	Serine (or cysteine) proteinase inhibitor, clade E, member 2	Serpin2
NM_011340	Serine (or cysteine) proteinase inhibitor, clade F, member 1	Serpinf1
NM_008878	Serine (or cysteine) proteinase inhibitor, clade F, member 2	Serpinf2
NM_008776	Serine (or cysteine) proteinase inhibitor, clade G, member 1	Serpin1
NM_009825	Serine (or cysteine) proteinase inhibitor, clade H, member 1	Serpinh1
NM_009250	Serine (or cysteine) proteinase inhibitor, clade I, member 1	Serpin1
NM_013671	Superoxide dismutase 2, mitochondrial	Sod2
NM_011640	Transformation related protein 53	Trp53
NM_010785	Transformed mouse 3T3 cell double minute 1	Mdm1
NM_010786	Transformed mouse 3T3 cell double minute 2	Mdm2
NM_013693	Tumor necrosis factor	Tnf
NM_011613	Tumor necrosis factor (ligand) superfamily, member 11	Tnfrsf11
NM_023517	Tumor necrosis factor (ligand) superfamily, member 13	Tnfrsf13
NM_009403	Tumor necrosis factor (ligand) superfamily, member 8	Tnfrsf8
NM_008764	Tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)	Tnfrsf1b
NM_028075	Tumor necrosis factor receptor superfamily, member 13c	Tnfrsf13c
NM_011608	Tumor necrosis factor receptor superfamily, member 17	Tnfrsf17
NM_013889	Tumor necrosis factor receptor superfamily, member 19	Tnfrsf19
NM_052975	Tumor necrosis factor receptor superfamily, member 21	Tnfrsf21
NM_011659	Tumor necrosis factor receptor superfamily, member 4	Tnfrsf4
NM_009395	Tumor necrosis factor, alpha-induced protein 1 (endothelial)	Tnfrap1
NM_009467	UDP-glucuronosyltransferase 2 family, member 5	Ugt2b5

Fig 1-III-3-6 Drug Metabolism に関与する遺伝子

Scatter Plot (direct) Aldh2 genotype 曝露前後比較

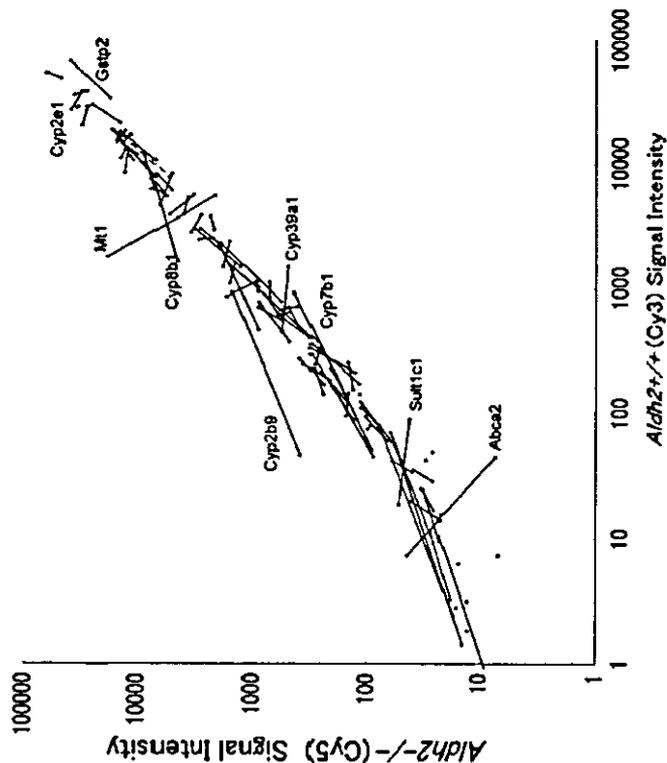


Table 1-III-3-6 Drug Metabolism に関与する遺伝子

Gene Bank Accession	Description	Gene Name
NM_134130	Abhydrolase domain containing 3	Abhd3
NM_013454	ATP-binding cassette, sub-family A (ABC1), member 2	Abca1
NM_007379	ATP-binding cassette, sub-family A (ABC1), member 2	Abca2
NM_007378	ATP-binding cassette, sub-family A (ABC1), member 4	Abca4
NM_013850	ATP-binding cassette, sub-family A (ABC1), member 7	Abca7
NM_019552	ATP-binding cassette, sub-family B (MDR/TAP), member 10	Abcb10
NM_021022	ATP-binding cassette, sub-family B (MDR/TAP), member 11	Abcb11
NM_011076	ATP-binding cassette, sub-family B (MDR/TAP), member 1A	Abcb1a
NM_008830	ATP-binding cassette, sub-family B (MDR/TAP), member 4	Abcb4
NM_023732	ATP-binding cassette, sub-family B (MDR/TAP), member 6	Abcb6
NM_019875	ATP-binding cassette, sub-family B (MDR/TAP), member 9	Abcb9
NM_008576	ATP-binding cassette, sub-family C (CFTR/MRP), member 1	Abcc1
NM_013806	ATP-binding cassette, sub-family C (CFTR/MRP), member 2	Abcc2

NM_013790	ATP-binding cassette, sub-family C (CFTR/MRP), member 5	Abcc5b
NM_021043	ATP-binding cassette, sub-family C (CFTR/MRP), member 9	Abcc9
NM_011994	ATP-binding cassette, sub-family D (ALD), member 2	Abcd2
NM_008992	ATP-binding cassette, sub-family D (ALD), member 4	Abcd4
NM_009593	ATP-binding cassette, sub-family G (WHITE), member 1	Abcg1
NM_011920	ATP-binding cassette, sub-family G (WHITE), member 2	Abcg2
NM_020239	ATP-binding cassette, sub-family G (WHITE), member 3	Abcg3
NM_026180	ATP-binding cassette, sub-family G (WHITE), member 8	Abcg8
NM_016803	Carbohydrate (chondroitin 6Sulfate) sulfotransferase 3	Chst3
NM_023850	Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1	Chst1
NM_007760	Carnitine acetyltransferase	CRAT
NM_007807	Cytochrome b-245, beta polypeptide	Cybb
NM_025797	Cytochrome b-5	Cyb5
NM_007805	Cytochrome b-581	Cyb5b1
NM_007808	Cytochrome c, somatic	Cycs
NM_009989	Cytochrome c, testis	Cyct
NM_009941	Cytochrome c oxidase subunit IV isoform 1	Cox4i1
NM_053091	Cytochrome c oxidase subunit IV isoform 2	Cox4i2
NM_007747	Cytochrome c oxidase subunit V isoform 1	Cox5i1
NM_007748	Cytochrome c oxidase, subunit VI a, polypeptide 1	Cox6a1
NM_053071	Mus musculus cytochrome c oxidase, subunit Vc	Cox6c
NM_009945	Cytochrome c oxidase, subunit VIIa 2	Cox7a2
NM_007750	Cytochrome c oxidase, subunit VIIIa	Cox8a
NM_009187	Cytochrome c oxidase subunit VIIa polypeptide 2-like	Cox7a2l
NM_025779	Cytochrome c oxidase subunit VIIb	Cox7b
NM_019779	Cytochrome P450, family 11, subfamily a, polypeptide 1	Cyp11a
NM_009993	Cytochrome P450, family 1, subfamily a, polypeptide 2	Cyp1a2
NM_133657	Cytochrome P450, family 2, subfamily a, polypeptide 12	Cyp2a12
NM_009998	Cytochrome P450, family 2, subfamily b, polypeptide 10	Cyp2b10
NM_010000	Cytochrome P450, family 2, subfamily b, polypeptide 11	Cyp2b11
NM_010003	Cytochrome P450, family 2, subfamily c, polypeptide 39	Cyp2c40
NM_010004	Cytochrome P450, family 2, subfamily c, polypeptide 40	Cyp2c40
NM_010005	Cytochrome P450, family 2, subfamily d, polypeptide 10	Cyp2d10
NM_019823	Cytochrome P450, family 2, subfamily d, polypeptide 22	Cyp2d22
NM_021282	Cytochrome P450, family 2, subfamily e, polypeptide 1	Cyp2e1
NM_007817	Cytochrome P450, family 2, subfamily f, polypeptide 2	Cyp2f2
NM_013809	Cytochrome P450, family 2, subfamily g, polypeptide 1	Cyp2g1
NM_010007	Cytochrome P450, family 2, subfamily j, polypeptide 5	Cyp2j5
NM_010008	Cytochrome P450, family 2, subfamily j, polypeptide 6	Cyp2j6
NM_018887	Cytochrome P450, family 39, subfamily a, polypeptide 1	Cyp39a1
NM_007820	Cytochrome P450, family 3, subfamily a, polypeptide 16	Cyp3a16
NM_010010	Cytochrome P450, family 46, subfamily a, polypeptide 1	Cyp46
NM_020010	Cytochrome P450, 51	Cyp51
NM_007824	Cytochrome P450, family 7, subfamily a, polypeptide 1	Cyp7a1
NM_007825	Cytochrome P450, family 7, subfamily b, polypeptide 1	Cyp7b1
NM_010012	Cytochrome P450, family 8, subfamily b, polypeptide 1	Cyp8b1

NM_017398	Cytochrome P450, family 3, subfamily a, polypeptide 41	Cyp3a41
NM_007823	Cytochrome P450, family 4, subfamily b, polypeptide 1	Cyp4b1
NM_022434	Cytochrome P450, family 4, subfamily f, polypeptide 14	Cyp4f14
NM_130882	Cytochrome P450, family 4, subfamily f, polypeptide 13	Cyp4f13
NM_007940	Epoxide hydrolase 2, cytoplasmic	Ephx2
NM_008160	Glutathione peroxidase 1	Gpx1
NM_030677	Glutathione peroxidase 2	Gpx2
NM_008161	Glutathione peroxidase 3	Gpx3
NM_008162	Glutathione peroxidase 4	Gpx4
NM_010344	Glutathione reductase 1	Gsr1
NM_008181	Glutathione S-transferase, alpha 1 [Ya]	Gsta1
NM_008183	Glutathione S-transferase, mu 2	Gstm2
NM_010360	Glutathione S-transferase, mu 5	Gstm5
NM_008184	Glutathione S-transferase, mu 6	Gstm6
NM_013541	Glutathione S-transferase, pi 2	Gstp2
NM_008180	Glutathione synthetase	Gss
NM_010363	Glutathione transferase zeta 1 (maleylacetate isomerase)	Gstz1
NM_008517	Leukotriene A4 hydrolase	Liah4h
NM_008521	Leukotriene C4 synthase	Licc4s
NM_013602	Metallothionein 1	Mt1
NM_010841	Metallothionein-like 5, testis-specific (testin)	Mt5
NM_019870	N-acetyltransferase ARD1 homolog (S. cerevisiae)	Ard1
NM_008898	P450 (cytochrome) oxidoreductase	Por
NM_026935	Sulfotransferase family, cytosolic, 1C, member 1	Sult1c2
NM_017465	Sulfotransferase family, cytosolic, 2B, member 1	Sult2b1
NM_018878	Sulfotransferase family 1B, member 1	Sult1b1
NM_013873	Sulfotransferase family 4A, member 1	Sult4a1
NM_016785	Thiopurine methyltransferase	Tpmt
NM_013863	Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	Tap1
NM_011530	Transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)	Tap2
NM_008467	UDP-glucuronosyltransferase 2 family, member 5	Ugt2b5
NM_011674	UDP-glucuronosyltransferase 8	Ugt8

Fig 1-III-3-7 Extracellular Matrix および Adhesion 関連遺伝子
Scatter Plot (direct) Aldh2 genotype 曝露前後比較

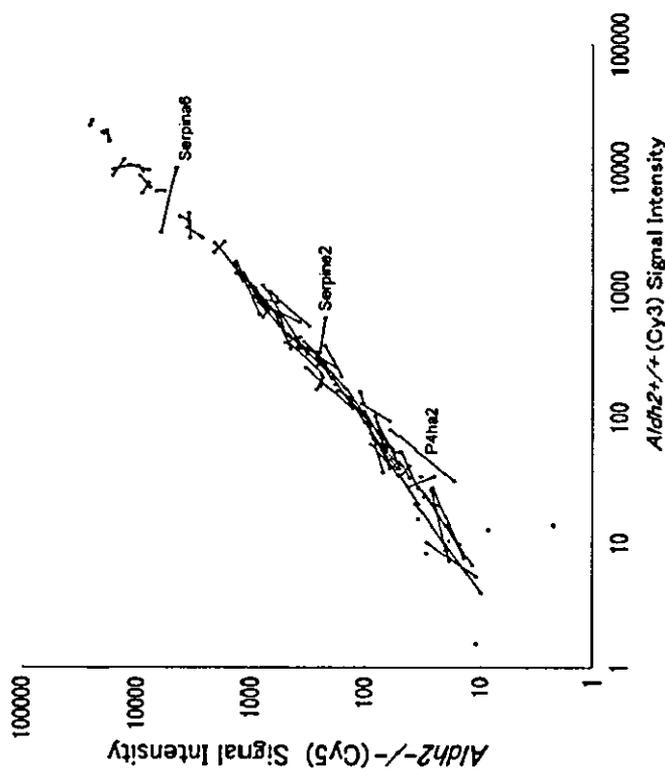


Table 1-III-3-7 Extracellular Matrix および Adhesion 関連遺伝子

Gene Bank Accession	Description	Gene Name
NM_008621	A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 1	Adams1
NM_011782	A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 5 (aggracanease-2)	Adams5
NM_009864	Cadherin 1	Cdh1
NM_009866	Cadherin 11	Cdh11
NM_019707	Cadherin 13	Cdh13
NM_007664	Cadherin 2	Cdh2
NM_009867	Cadherin 4	Cdh4
NM_009868	Cadherin 5	Cdh5
NM_007667	Cadherin 8	Cdh8
NM_009818	Catenin alpha 1	Ctna1
NM_009819	Catenin alpha 2	Ctna2

NM_007614	Catenin beta	Ctnnb
NM_023465	Catenin beta interacting protein 1	Catbip1
NM_008729	Catenin delta 2	Catnd2
NM_007615	Catenin src	Catns
NM_009883	Cathepsin D	Ctsd
NM_007799	Cathepsin E	Ctsf
NM_019861	Cathepsin F	Ctsf
NM_007800	Cathepsin G	Ctsg
NM_007801	Cathepsin H	Ctsh
NM_009884	Cathepsin L	Ctsl
NM_021281	Cathepsin S	Ctss
NM_022325	Cathepsin Z	Ctss
NM_010581	CD47 antigen (RH-related antigen, integrin-associated signal transducer)	Cd47
NM_007727	Contactin 1	Cntn1
NM_008779	Contactin 3	Cntn3
NM_017383	Contactin 6	Cntn6
NM_009879	Contactin 9	Cntn9
NM_007793	Cystatin B	Ctzb
NM_009976	Cystatin C	Ctsc
NM_009977	Cystatin F (leukocystatin)	Ctfc
NM_033037	Cysteine dioxygenase 1, cytosolic	Cdo1
NM_007763	Cysteine rich intestinal protein	Crip1
NM_007791	Cysteine rich protein 1	Carp1
NM_024223	Cysteine rich protein 2	Carp2
NM_010516	Cysteine rich protein 61	Carp61
NM_028850	Cysteine-rich hydrophobic domain 2	Chc2
NM_133930	Cysteine-rich with EGF-like domains 1	Crd11
NM_007899	Extracellular matrix protein 1	Ecm1
NM_009149	Golgi apparatus protein 1	Glg1
NM_008396	Integrin alpha 2	Iiga2
NM_010576	Integrin alpha 4	Iiga4
NM_008397	Integrin alpha 6	Iiga6
NM_008401	Integrin alpha M	Igam
NM_021334	Integrin alpha X	Iigax
NM_008403	Integrin beta 1 binding protein 1	Igfb1bp1
NM_008404	Integrin beta 2	Igfb2
NM_010580	Integrin beta 5	Igfb5
NM_010494	Intercellular adhesion molecule 2	Icam2
NM_008480	Lamin, alpha 1	Lama1
NM_008485	Lamin, gamma 2	Lamc2
NM_019390	Lamin A	Lmna
NM_010721	Lamin B1	Lmnb1
NM_011029	Lamin receptor 1 (67KD, ribosomal protein_SA)	Lamv1
NM_008606	Matrix metalloproteinase 11	Mmp11
NM_008605	Matrix metalloproteinase 12	Mmp12
NM_008608	Matrix metalloproteinase 14 (membrane-inserted)	Mmp14

NM_008609	Matrix metalloproteinase 15	Mmp15
NM_011846	Matrix metalloproteinase 17	Mmp17
NM_008610	Matrix metalloproteinase 2	Mmp2
NM_010809	Matrix metalloproteinase 3	Mmp3
NM_023799	Meningioma expressed antigen 5 (hyaluronidase)	Mgae5
NM_008816	Platelet/endothelial cell adhesion molecule	Pecam1
NM_008788	Procollagen C-proteinase enhancer protein	Pcece
NM_011961	Procollagen lysine 2-oxoglutarate 5-dioxygenase 2	Flood2
NM_007734	Procollagen, type IV, alpha 3	Col4a3
NM_015734	Procollagen, type V, alpha 1	Col5a1
NM_007737	Procollagen, type V, alpha 2	Col5a2
NM_016919	Procollagen, type V, alpha 3	Col5a3
NM_007729	Procollagen, type XI, alpha 1	Col9a1
NM_009926	Procollagen, type XI, alpha 2	Col9a2
NM_009928	Procollagen, type XV	Col15
NM_009929	Procollagen, type XVIII, alpha 1	Col18a1
NM_011031	Procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha II polypeptide	P4ha2
NM_009242	Secreted acidic cysteine rich glycoprotein	Sparc
NM_011346	Selectin, lymphocyte	Sell
NM_011347	Selectin, platelet	Selp
NM_008458	Serine (or cysteine) proteinase inhibitor, clade A, member 3C	Serpina3c
NM_008785	Serine (or cysteine) proteinase inhibitor, clade A, member 5	Serpina5
NM_007618	Serine (or cysteine) proteinase inhibitor, clade A, member 6	Serpina6
NM_009254	Serine (or cysteine) proteinase inhibitor, clade B, member 6	Serpinh6
NM_027548	Serine (or cysteine) proteinase inhibitor, clade B, member 7	Serpinh7
NM_080844	Serine (or cysteine) proteinase inhibitor, clade C (enithrombin), member 1	Serpinc1
NM_009255	Serine (or cysteine) proteinase inhibitor, clade E, member 2	Serpine2
NM_011340	Serine (or cysteine) proteinase inhibitor, clade F, member 1	Serpinf1
NM_008878	Serine (or cysteine) proteinase inhibitor, clade F, member 2	Serpinf2
NM_009776	Serine (or cysteine) proteinase inhibitor, clade G, member 1	Serping1
NM_009825	Serine (or cysteine) proteinase inhibitor, clade H, member 1	Serpinh1
NM_009250	Serine (or cysteine) proteinase inhibitor, clade I, member 1	Serpin1
NM_031176	Tenascin XB	Tnxb
NM_013691	Thrombospondin 3	THBS3
NM_011582	Thrombospondin 4	THBS4
NM_011594	Tissue inhibitor of metalloproteinase 2	Timp2
NM_011595	Tissue inhibitor of metalloproteinase 3	Timp3
NM_080639	Tissue inhibitor of metalloproteinase 4	Timp4
NM_011707	Vitreocin	Vtn

Fig 1-III-3-8 Toll-Like Receptor Signaling Pathway 関連遺伝子
Scatter Plot (direct) *Aldh2* genotype 曝露前後比較

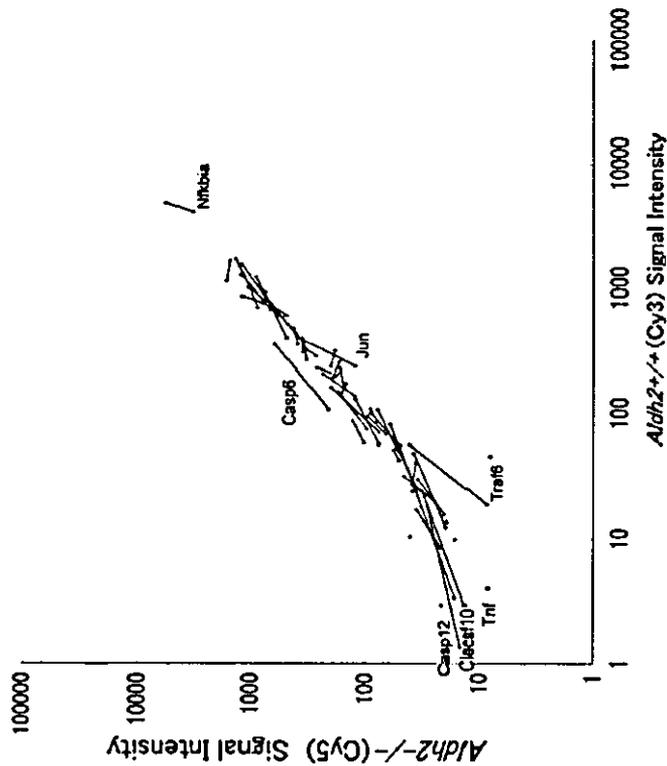


Table 1-III-3-8 Toll-Like Receptor Signaling Pathway 関連遺伝子

Gene Bank Accession	Description	Gene name
NM_009807	Caspase 1	Casp1
NM_009808	Caspase 12	Casp12
NM_007610	Caspase 2	Casp2
NM_009810	Caspase 3, apoptosis related cysteine protease	Casp3
NM_009811	Caspase 6	Casp6
NM_007611	Caspase 7	Casp7
NM_011997	Caspase 8 associated protein 2	Casp8ap2
NM_015733	Caspase 9	Casp9
NM_009841	CD14 antigen	Cd14
NM_007700	Conserved helix-loop-helix ubiquitous kinase	Chuk
NM_020001	C-type (calcium dependent, carbohydrate recognition domain) lectin, superfamily member 10	Clecsf10
NM_016751	C-type (calcium dependent, carbohydrate recognition domain) lectin, superfamily member 13	Clecsf13

	member 13	
NM_021364	C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 5	Clecsf5
NM_013508	ELK3, member of ETS oncogene family	Etk3
NM_010234	FBJ osteosarcoma oncogene	Fos
NM_030701	G protein-coupled receptor 105B	Gpr105b
NM_016696	Glypican 1	Gpc1
NM_016697	Glypican 3	Gpc3
NM_008284	Harvey rat sarcoma virus oncogene	Hras1
NM_009300	Heat shock 70 kDa protein 4	Hsp4
NM_008253	High mobility group box 3	Hmgb3
NM_010547	Inhibitor of kappaB kinase gamma	Ikkkg
NM_010511	Interferon gamma receptor	Ifng1
NM_008338	Interferon gamma receptor 2	Ifng2
NM_008326	Interferon inducible protein 1	Irf1
NM_008391	Interferon regulatory factor 2	Irf2
NM_016849	Interferon regulatory factor 3	Irf3
NM_019440	Interferon-g induced GTPase 2	Irgp2
NM_010591	Jun oncogene	Jun
NM_008593	Lymphocyte antigen 78	Ly78
NM_010745	Lymphocyte antigen 86	Ly86
NM_008534	Lymphocyte antigen 9	Ly9
NM_016923	Lymphocyte antigen 96	Ly96
NM_009158	Mitogen activated protein kinase 10	Mapk10
NM_011951	Mitogen activated protein kinase 14	Mapk14
NM_016700	Mitogen activated protein kinase 8	Mapk8
NM_016961	Mitogen activated protein kinase 9	Mapk9
NM_013931	Mitogen-activated protein kinase 8 interacting protein 3	Mapk8ip3
NM_010762	Myelin and lymphocyte protein, T-cell differentiation protein	Mal
NM_010907	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	Nfkbia
NM_010908	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, beta	Nfkibb
NM_008690	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	Nfkбие
NM_010909	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 1	Nfkbl1
NM_023324	Pellico 1	Pel1
NM_011198	Prostaglandin-endoperoxide synthase 2	Pigs2
NM_012029	Signaling intermediate in Toll pathway-evolutionarily conserved	Stipsc
NM_009424	Trif receptor-associated factor 6	Traf6
NM_023764	Toll interacting protein	Tollip
NM_011905	Toll-like receptor 2	Tlr2
NM_021297	Toll-like receptor 4	Tlr4
NM_013693	Tumor necrosis factor	Tnf
NM_080560	Ubiquitin-conjugating enzyme E2N	Ube2n
NM_005045	V-re1 reticuloendotheliosis viral oncogene homolog A, (avian)	Rela

Fig 1-III-3-9 Endothelial Cell 關連遺伝子
Scatter Plot (direct) *Aldh2* genotype 曝露前後比較

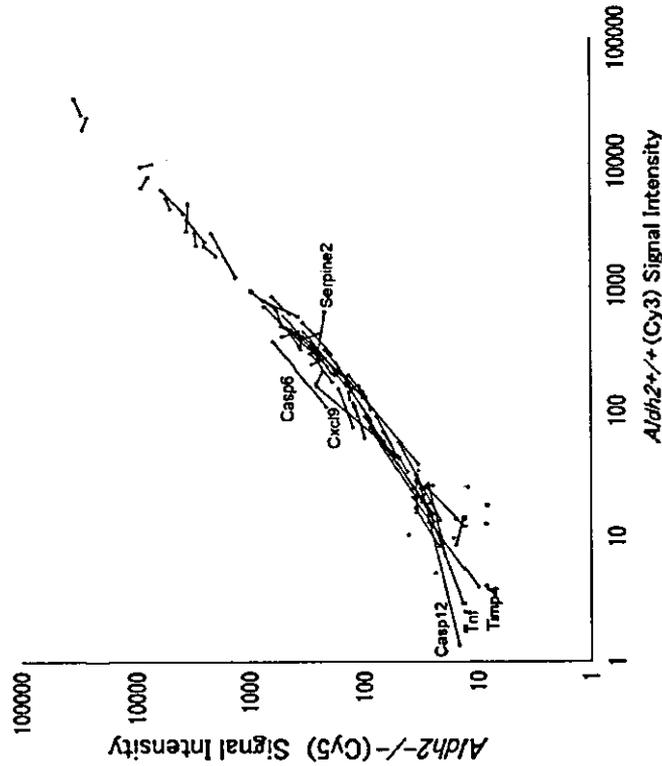


Table 1-III-3-9 Endothelial Cell 關連遺伝子

Gene Bank Accession	Description	Gene Name
NM_009640	Angiopoietin	Angp1
NM_007429	Angiotensin II receptor, type 2	Agtr2
NM_009673	Anexin A5	Anxa5
NM_007464	Baculoviral IAP repeat-containing 2	Birc3
NM_007465	Baculoviral IAP repeat-containing 3	Birc2
NM_009741	B-cell leukemia/lymphoma 2	Bcl2
NM_007527	Bcl2-associated X protein	Bax
NM_009743	Bcl2-like	Bcl2l1
NM_009868	Cadherin 5	Cdh5
NM_009950	CASP2 and RIPK1 domain containing adaptor with death domain	Cradd
NM_009807	Caspase 1	Casp1
NM_009808	Caspase 12	Casp12
NM_007610	Caspase 2	Casp2

NM_009810	Caspase 3, apoptosis related cysteine protease	Casp3
NM_009811	Caspase 6	Casp6
NM_007611	Caspase 7	Casp7
NM_011997	Caspase 8 associated protein 2	Cas8ap2
NM_015733	Caspase 9	Casp9
NM_011331	Chemokine (C-C motif) ligand 12	Ccl12
NM_011332	Chemokine (C-C motif) ligand 17	Ccl17
NM_011888	Chemokine (C-C motif) ligand 19	Ccl19
NM_016960	Chemokine (C-C motif) ligand 20	Ccl20
NM_009137	Chemokine (C-C motif) ligand 22	Ccl22
NM_019577	Chemokine (C-C motif) ligand 24	Ccl24
NM_009138	Chemokine (C-C motif) ligand 25	Ccl25
NM_013652	Chemokine (C-C motif) ligand 4	Ccl4
NM_013654	Chemokine (C-C motif) ligand 7	Ccl7
NM_021443	Chemokine (C-C motif) ligand 8	Ccl8
NM_013655	Chemokine (C-X-C motif) ligand 12	Cxcl12
NM_019568	Chemokine (C-X-C motif) ligand 14	Cxcl14
NM_011339	Chemokine (C-X-C motif) ligand 15	Cxcl15
NM_008599	Chemokine (C-X-C motif) ligand 9	Cxcl9
NM_007693	Chromogranin A	Chga
NM_007694	Chromogranin B	Chgb
NM_007728	Coagulation factor C homolog (Limulus polyphemus)	Coch
NM_010168	Coagulation factor II	F2
NM_010169	Coagulation factor II (thrombin) receptor	F2r
NM_010170	Coagulation factor II (thrombin) receptor-like 2	F2rl2
NM_007976	Coagulation factor V	F5
NM_010172	Coagulation factor VII	F7
NM_007972	Coagulation factor X	F10
NM_021489	Coagulation factor XII (Hageman factor)	F12
NM_031164	Coagulation factor XIII, beta subunit	F13
NM_007778	Colony stimulating factor 1 (macrophage)	Csf1
NM_009971	Colony stimulating factor 3 (granulocyte)	Csf3
NM_013690	Endothelial-specific receptor tyrosine kinase	Tek
NM_007904	Endothelin receptor type B	Etnrb
NM_010228	FMS-like tyrosine kinase 1	Fli1
NM_010229	FMS-like tyrosine kinase 3	Fli3
NM_013520	FMS-like tyrosine kinase 3 ligand	Fli3l
NM_010370	Granzyme A	Gzma
NM_013542	Granzyme B	Gzmb
NM_008396	Integrin alpha 2	Iiga2
NM_010576	Integrin alpha 4	iiga4
NM_008397	Integrin alpha 6	Iiga6
NM_008401	Integrin alpha M	Iigam
NM_021334	Integrin alpha X	Iigax
NM_008403	Integrin beta 1 binding protein 1	Iigbp1
NM_008404	Integrin beta 2	Iigb2

NM_010580	Integrin beta 5	Igfb5
NM_010581	Integrin-associated protein	Igap
NM_010494	Intercellular adhesion molecule 2	Icam2
NM_008350	Interleukin 11	I11
NM_010612	Kinase insert domain protein receptor	Kdr
NM_008606	Matrix metalloproteinase 11	Mmp11
NM_008605	Matrix metalloproteinase 12	Mmp12
NM_008608	Matrix metalloproteinase 14 (membrane-inserted)	Mmp14
NM_008609	Matrix metalloproteinase 15	Mmp15
NM_011846	Matrix metalloproteinase 17	Mmp17
NM_008610	Matrix metalloproteinase 2	Mmp2
NM_010809	Matrix metalloproteinase 3	Mmp3
NM_008713	Nitric oxide synthase 3, endothelial cell	Nos3
NM_008756	Occludin	Ocln
NM_008877	Plasminogen	Plg
NM_008816	Platelet/endothelial cell adhesion molecule	Pecam1
NM_009929	Procollagen, type XVIII, alpha 1	Col18a1
NM_008969	Prostaglandin-endoperoxide synthase 1	Ptgs1
NM_011198	Prostaglandin-endoperoxide synthase 2	Ptgs2
NM_009068	Receptor (TNFRSF)-interacting serine-threonine kinase 1	Ripk1
NM_011346	Selectin, lymphocyte	Sell
NM_011347	Selectin, platelet	Selp
NM_009255	Serre (or cysteine) proteinase inhibitor, clade E, member 2	Serpine2
NM_013671	Superoxide dismutase 2, mitochondrial	Sod2
NM_011594	Tissue inhibitor of metalloproteinase 2	Timp2
NM_011595	Tissue inhibitor of metalloproteinase 3	Timp3
NM_006639	Tissue inhibitor of metalloproteinase 4	Timp4
NM_009367	Transforming growth factor, beta 2	Tgfb2
NM_013693	Tumor necrosis factor	Tnf
NM_008764	Tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)	Tnfrsf11b
NM_009395	Tumor necrosis factor, alpha-induced protein 1 (endothelial)	Tnfrsf1
NM_011723	Xanthine dehydrogenase	Xdh

Fig 1-III-3-10 Common cytokine 遺伝子
Scatter Plot (direct) *Aldh2* genotype 曝露前後比較

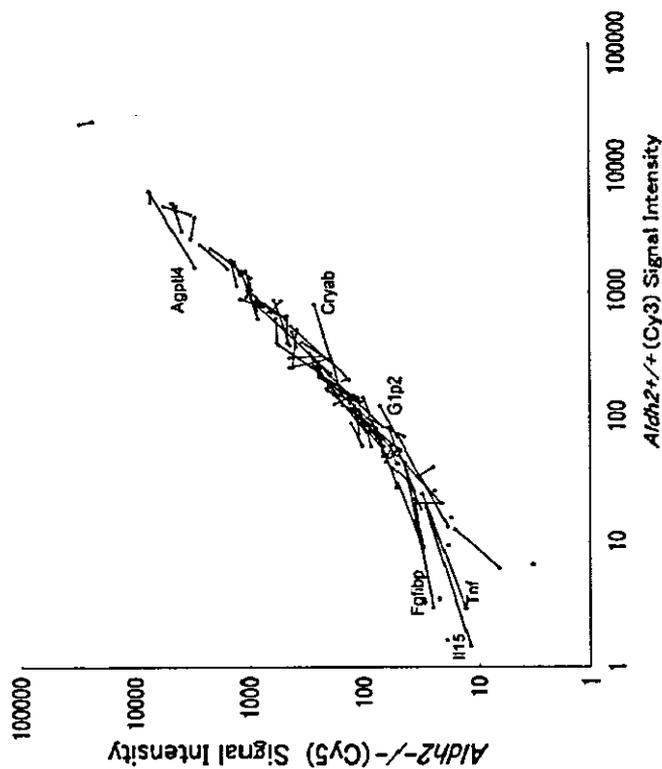


Table 1-III-3-10 Common cytokine 遺伝子

Gene Bank Accession	Description	Gene Name
NM_019467	Allograft inflammatory factor 1	Aif1
NM_009640	Angiopoietin	Angpt1
NM_020581	Angiopoietin-like 4	Angpl4
NM_007554	Bone morphogenetic protein 4	Bmp4
NM_007556	Bone morphogenetic protein 6	Bmp6
NM_007778	Colony stimulating factor 1 (macrophage)	Csf1
NM_007780	Colony stimulating factor 2 receptor, beta 1, low-affinity (granulocyte/macrophage)	Csf2rb1
NM_007781	Colony stimulating factor 2 receptor, beta 2, low-affinity (granulocyte/macrophage)	Csf2rb2
NM_009871	Colony stimulating factor 3 (granulocyte)	Csf3
NM_009864	Crystallin, alpha B	Cryab
NM_030704	Crystallin, alpha C	Cryac
NM_021541	Crystallin, beta A2	Cryba2
NM_030004	Crystallin, lambda 1	Cryl1

NM_016669	Crystallin, mu	Crym
NM_010149	Erythropoietin receptor	Epor
NM_008013	Fibronogen-like protein 2	Fglt2
NM_021438	Fibroblast growth factor (acidic) intracellular binding protein	Fglibp
NM_010200	Fibroblast growth factor 13	Fgf13
NM_030610	Fibroblast growth factor 20	Fgf20
NM_020013	Fibroblast growth factor 21	Fgf21
NM_008006	Fibroblast growth factor 7	Fgf7
NM_008009	Fibroblast growth factor binding protein 1	Fgfbp1
NM_008015	Fibroblast growth factor inducible 14	Fin14
NM_008016	Fibroblast growth factor inducible 15	Fin15
NM_008017	Fibroblast growth factor inducible 16	Fin16
NM_010206	Fibroblast growth factor receptor 1	Fgfr1
NM_010207	Fibroblast growth factor receptor 2	Fgfr2
NM_008010	Fibroblast growth factor receptor 3	Fgfr3
NM_054071	Fibroblast growth factor receptor-like 1	Fgfl1
NM_019447	Hepatocyte growth factor activator	Hgfac
NM_008342	Insulin-like growth factor binding protein 2	Igfbp2
NM_010517	Insulin-like growth factor binding protein 4	Igfbp4
NM_010518	Insulin-like growth factor binding protein 5	Igfbp5
NM_008344	Insulin-like growth factor binding protein 6	Igfbp6
NM_008340	Insulin-like growth factor binding protein, acid labile subunit	Igfls
NM_010508	Interferon (alpha and beta) receptor 1	Ifnar1
NM_010509	Interferon (alpha and beta) receptor 2	Ifnar2
NM_008327	Interferon activated gene 202A	Ifi202b
NM_008329	Interferon activated gene 204	Ifi204
NM_022329	Interferon alpha responsive gene, 15 kDa	Irf15
NM_008394	Interferon dependent positive acting transcription factor 3 gamma	Isg3g
NM_008330	Interferon gamma inducible protein, 47 kDa	Ifi47
NM_010511	Interferon gamma receptor	Ifngr1
NM_008338	Interferon gamma receptor 2	Ifngr2
NM_008326	Interferon inducible protein 1	Ifl1
NM_008391	Interferon regulatory factor 2	Irf2
NM_016849	Interferon regulatory factor 3	Irf3
NM_019440	Interferon-g induced GTPase 2	Irgp2
NM_030701	G protein-coupled receptor 109B	Gpr109b
NM_008331	Interferon-induced protein with tetratricopeptide repeats 1	Ifr1
NM_008332	Interferon-induced protein with tetratricopeptide repeats 2	Ifr2
NM_015783	Interferon-related developmental regulator 1	Ifrd1
NM_020583	Interferon-stimulated protein (15 kDa)	Isp2
NM_020583	Interferon-stimulated protein (20 kDa)	Isp20
NM_034103	Interleukin 1 receptor accessory protein	Ilt1rap
NM_010555	Interleukin 1 receptor, type II	Ilt12
NM_008349	Interleukin 10 receptor, beta	Ilt10r2
NM_016971	Interleukin 22	Ilt22
NM_008350	Interleukin 11	Ilt11

NM_010549	Interleukin 11 receptor, alpha chain 1	Il11ra1
NM_010550	Interleukin 11 receptor, alpha chain 2	Il11ra2
NM_008357	Interleukin 15	Il15
NM_008359	Interleukin 17 receptor	Il17r
NM_010531	Interleukin 18 binding protein	Il18bp
NM_021887	Interleukin 21 receptor	Il21r
NM_031252	Interleukin 23, alpha subunit p19	Il23a
NM_010557	Interleukin 4 receptor, alpha	Il4ra
NM_013598	Kit ligand	Kitl
NM_010736	Lymphotoxin B receptor	Lbr
NM_010907	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	Nfkb1a
NM_010908	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, beta	Nfkb1b
NM_008690	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	Nfkb1e
NM_010909	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 1	Nfkb1l1
NM_011058	Platelet derived growth factor receptor, alpha polypeptide	Pdgfra
NM_008809	Platelet derived growth factor receptor, beta polypeptide	Pdgfrb
NM_008808	Platelet derived growth factor, alpha	Pdgra
NM_011057	Platelet derived growth factor, B polypeptide	Pdgrb
NM_031868	Protein phosphatase 1, catalytic subunit, alpha isoform	Ppp1ca
NM_009379	Thrombopoietin	Thpo
NM_031199	Transforming growth factor alpha	Tgfa
NM_009367	Transforming growth factor, beta 2	Tgfb2
NM_009368	Transforming growth factor, beta 3	Tgfb3
NM_013683	Tumor necrosis factor	Tnf
NM_011613	Tumor necrosis factor (ligand) superfamily, member 11	Tnfrsf11
NM_023517	Tumor necrosis factor (ligand) superfamily, member 13	Tnfrsf13
NM_009403	Tumor necrosis factor (ligand) superfamily, member 8	Tnfrsf8
NM_008764	Tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)	Tnfrsf1b
NM_028075	Tumor necrosis factor receptor superfamily, member 13c	Tnfrsf13c
NM_011608	Tumor necrosis factor receptor superfamily, member 17	Tnfrsf17
NM_013869	Tumor necrosis factor receptor superfamily, member 19	Tnfrsf19
NM_052975	Tumor necrosis factor receptor superfamily, member 21	Tnfrsf21
NM_011659	Tumor necrosis factor receptor superfamily, member 4	Tnfrsf4
NM_009395	Tumor necrosis factor, alpha-induced protein 1 (endothelial)	Tnfrap1
NM_009505	Vascular endothelial growth factor A	Vegfa
NM_011697	Vascular endothelial growth factor B	Vegfb
NM_009506	Vascular endothelial growth factor C	Vegfc