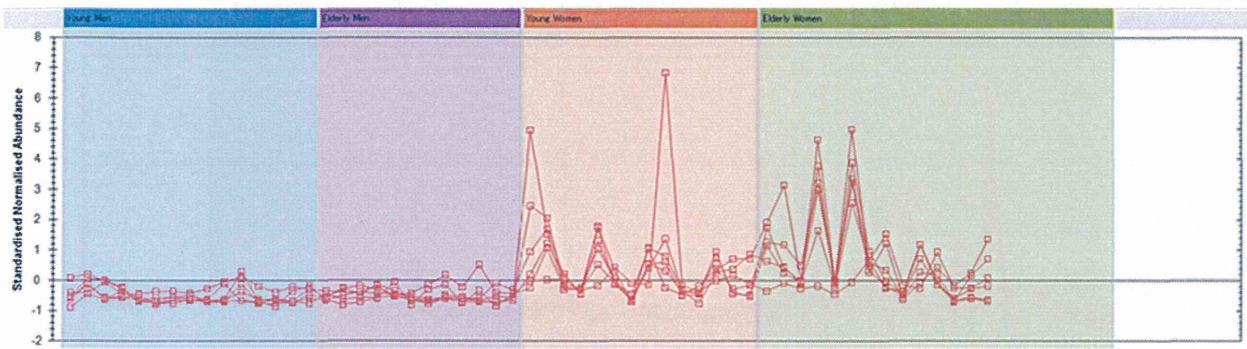
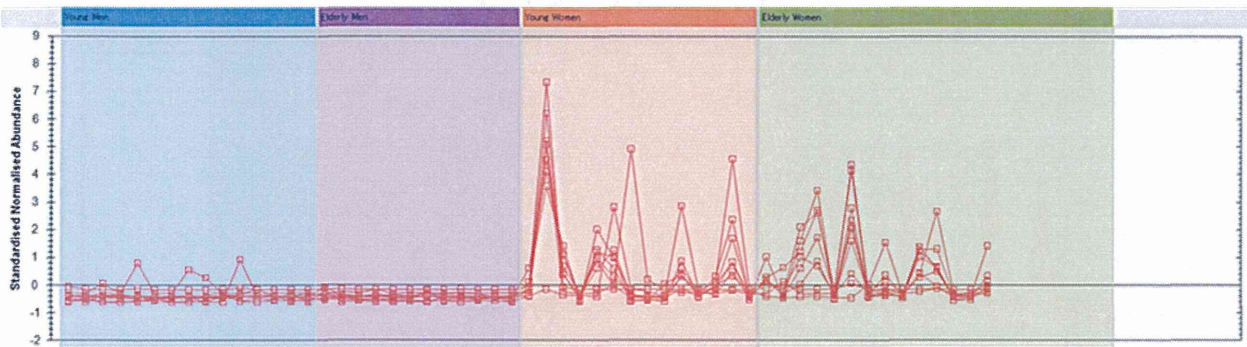


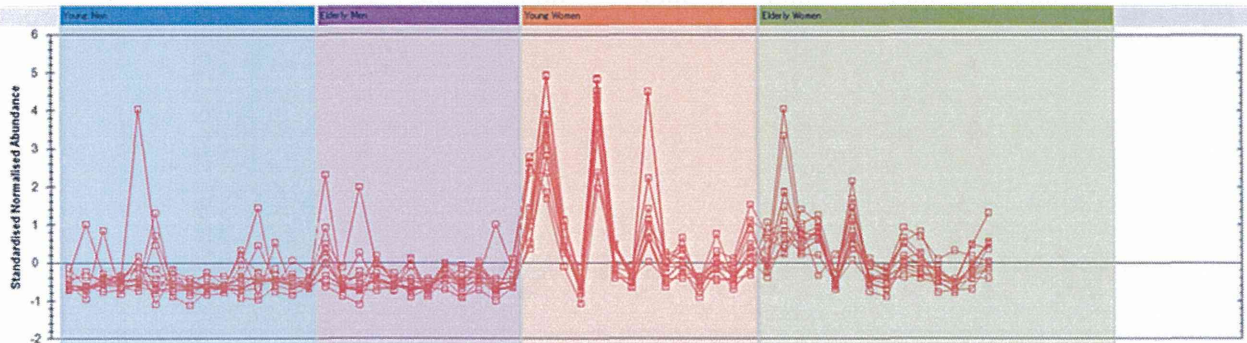
Men young Men aged Women young Women aged



S10A11 Protein S100-A11



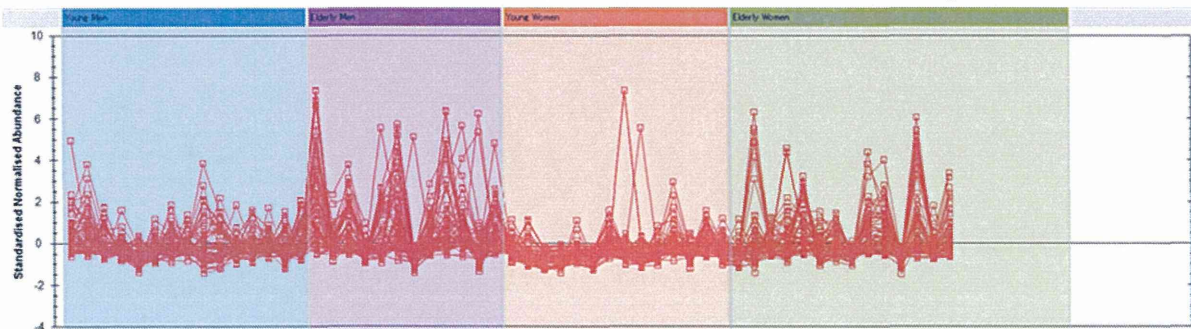
S10A7-Protein S100-A7



ANXA2 Annexin A2

図 26 高齢者で発現が増加するタンパク質の例

Men young Men aged Women young Women aged



PGRP2 - N-acetylmuramoyl-L-alanine amidase

図 27 男性高齢者に特異的に高発現するタンパク質

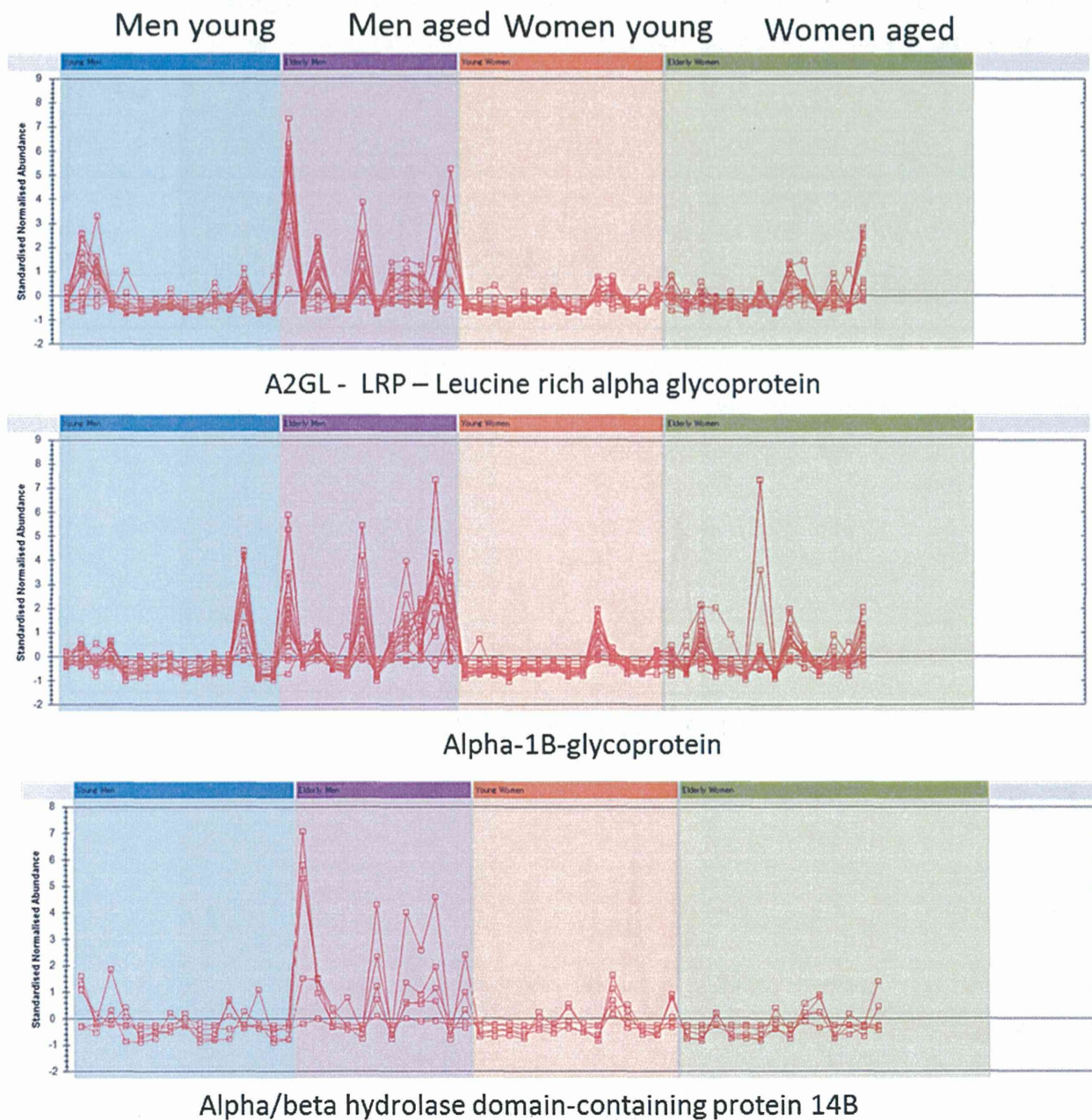
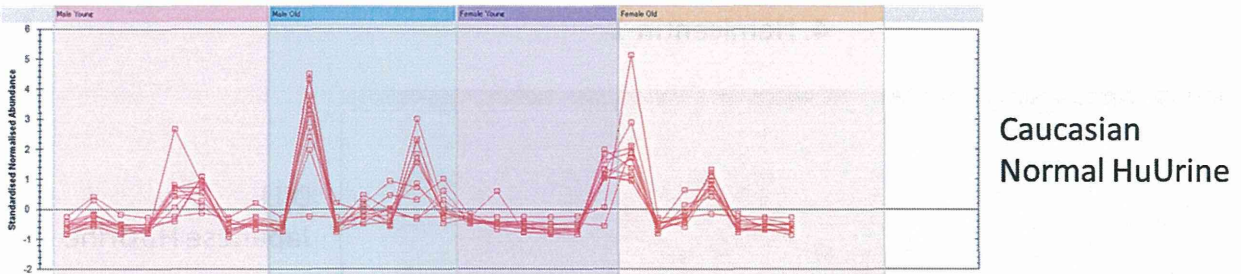
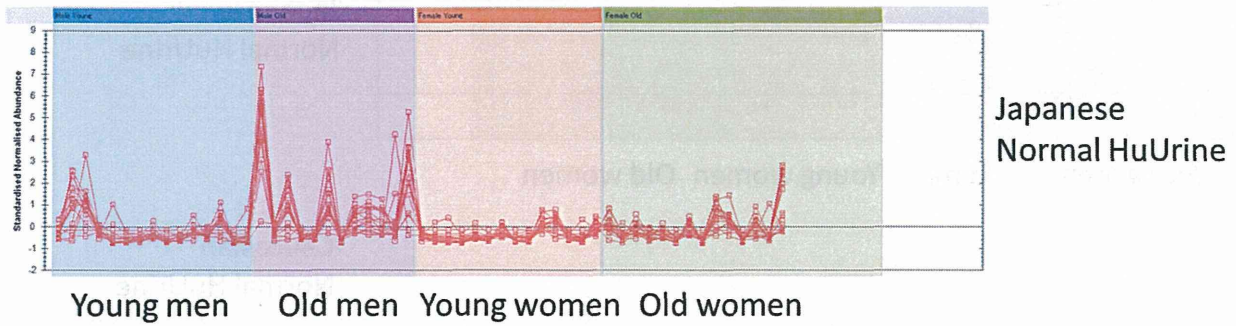
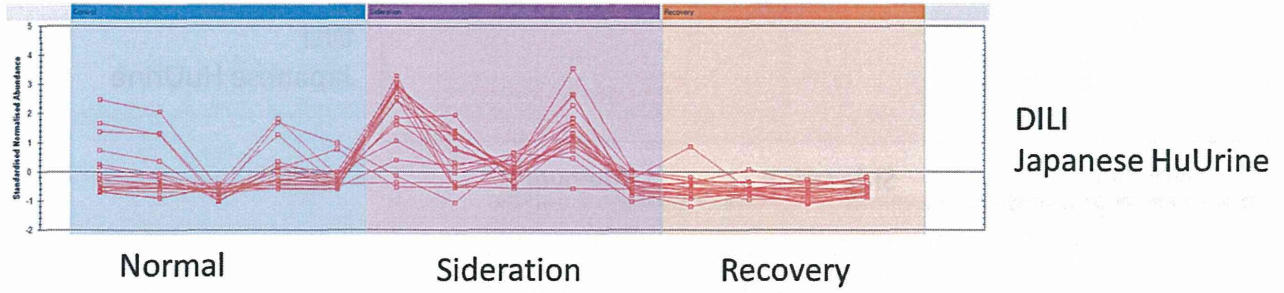
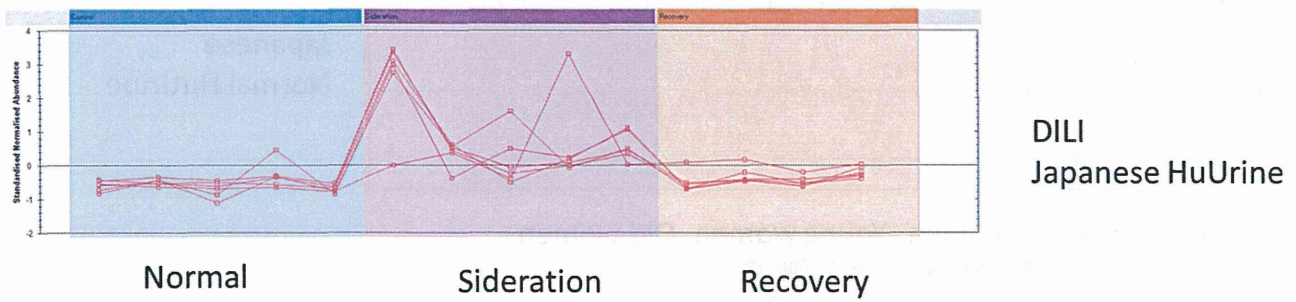


図 28 薬物性肝障害のバイオマーカー候補タンパク質の発現パターン

1. Leucine-rich alpha-2-glycoprotein



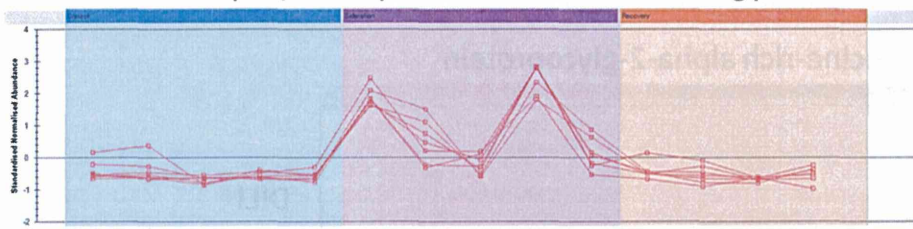
2. Alpha-crystallin B chain



Japanese Normal HuUrine

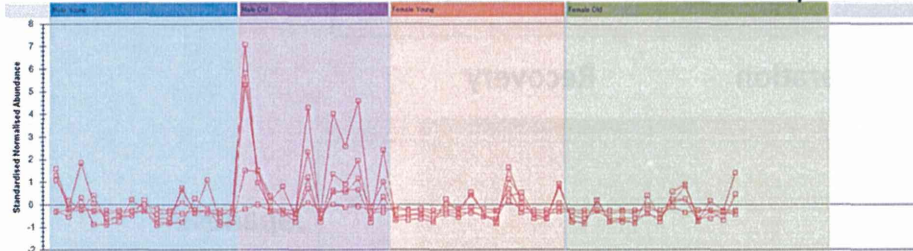
Caucasian Normal HuUrine

3. Alpha/beta hydrolase domain-containing protein 14B



DILI
Japanese HuUrine

Normal Sideration Recovery

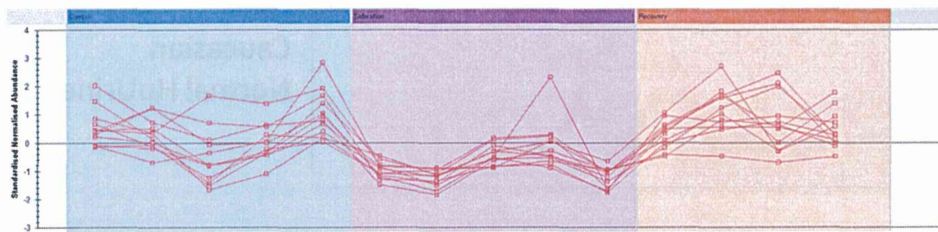


Japanese
Normal HuUrine

Young men Old men Young women Old women

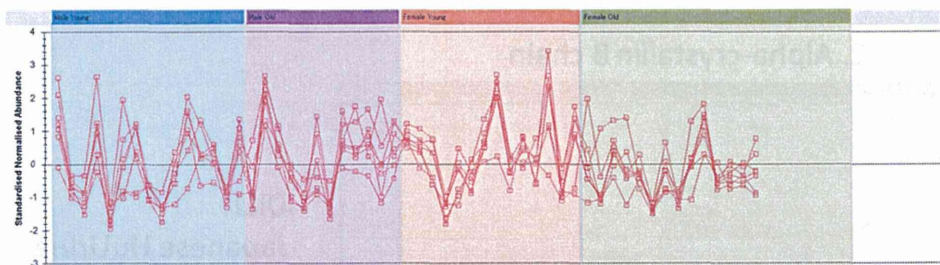
Caucasian
Normal HuUrine

4. Hemicentin-1



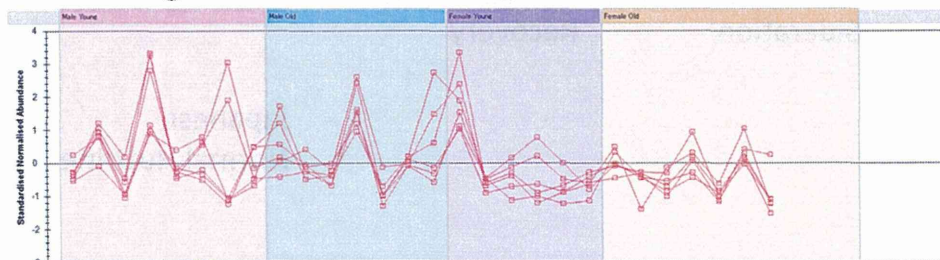
DILI
Japanese HuUrine

Normal Sideration Recovery



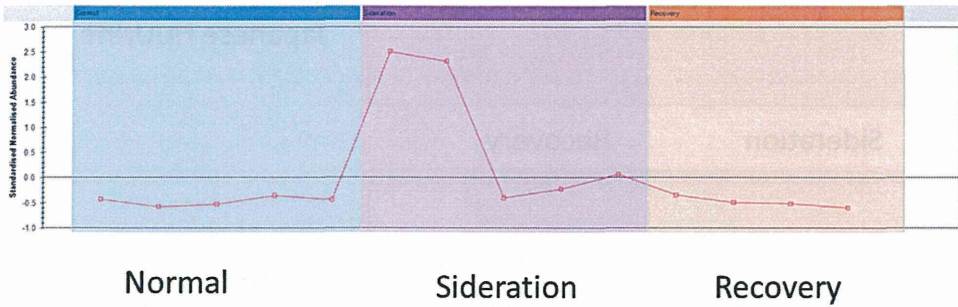
Japanese
Normal HuUrine

Young men Old men Young women Old women



Caucasian
Normal HuUrine

5. Trypsin-2

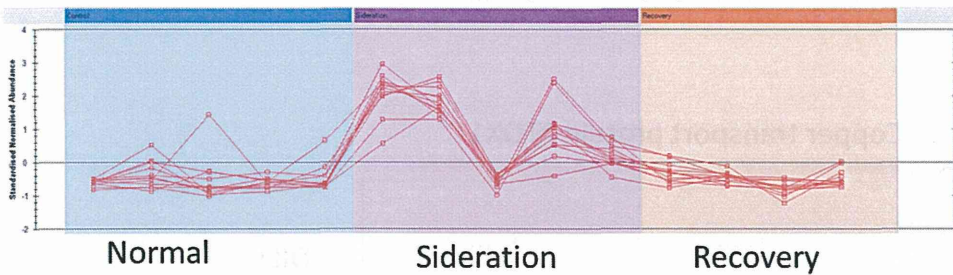


DILI
Japanese HuUrine

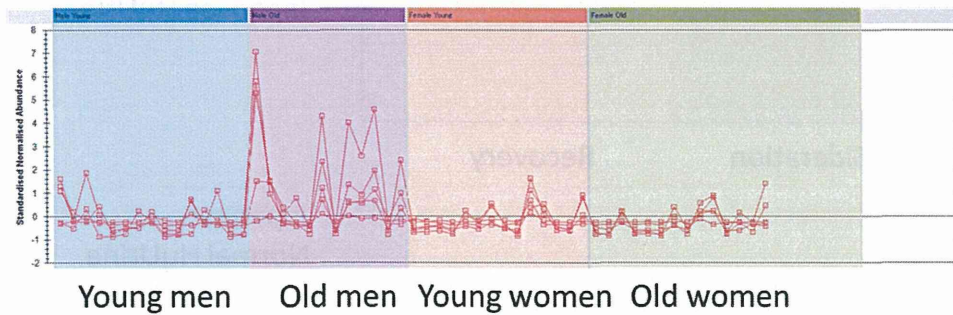
Japanese
Normal HuUrine

Caucasian
Normal HuUrine

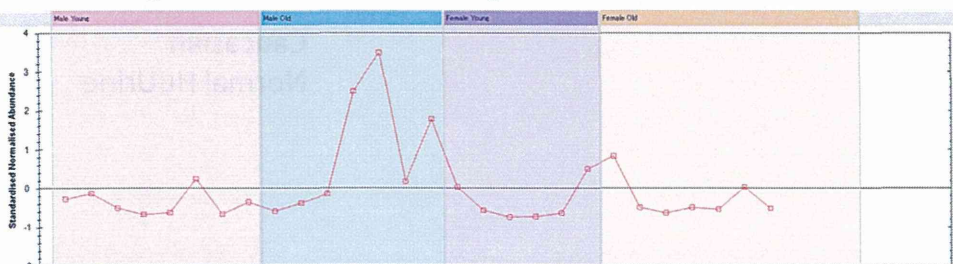
6. Glutamyl aminopeptidase



DILI
Japanese HuUrine

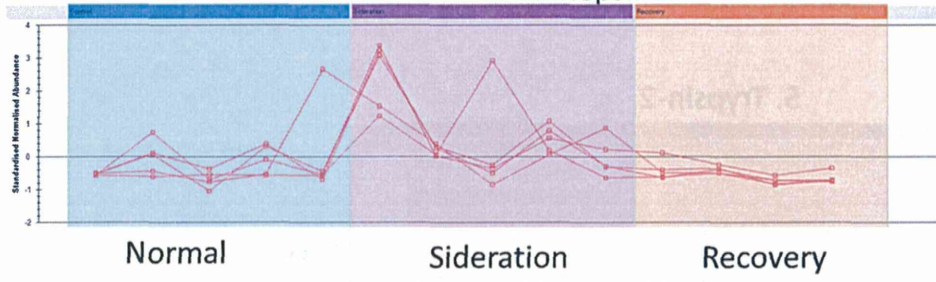


Japanese
Normal HuUrine

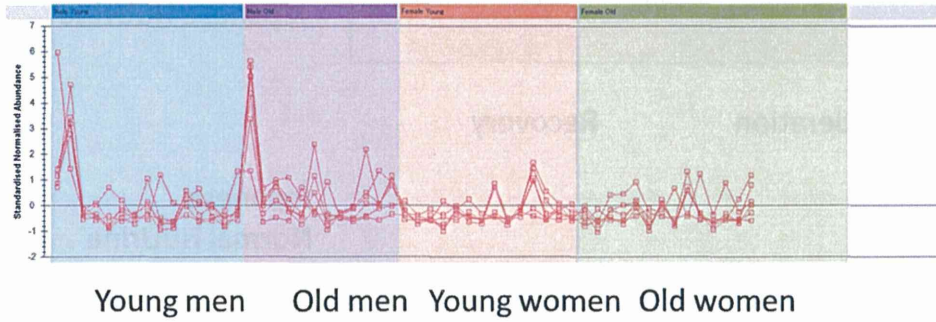


Caucasian
Normal HuUrine

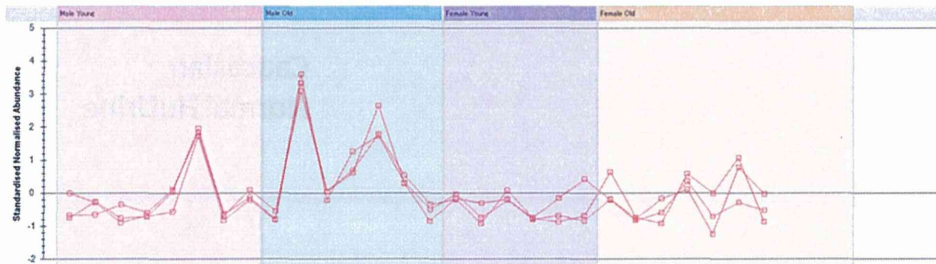
7. Cathepsin Z



DILI
Japanese HuUrine

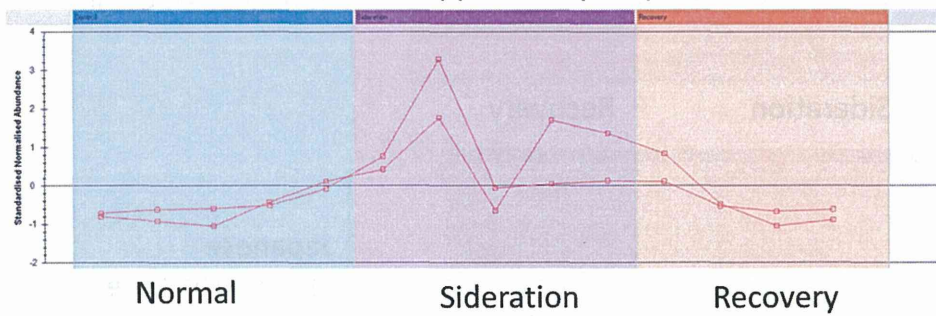


Japanese
Normal HuUrine



Caucasian
Normal HuUrine

8. Copper transport protein ATOX1

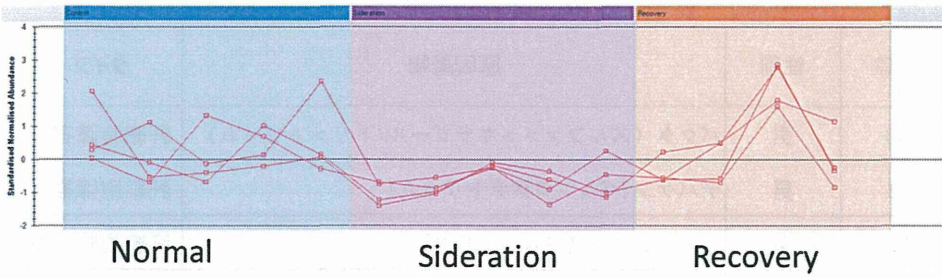


DILI
Japanese HuUrine

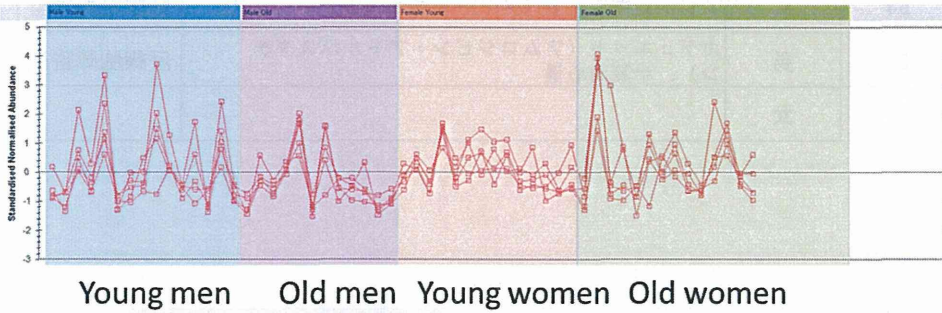
Japanese
Normal HuUrine

Caucasian
Normal HuUrine

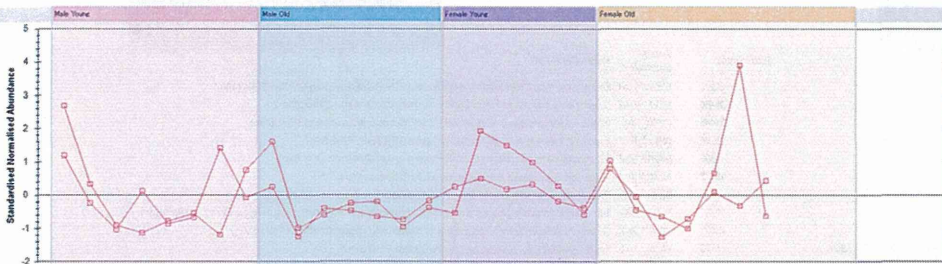
9. Receptor-type tyrosine-protein phosphatase eta



DILI
Japanese HuUrine

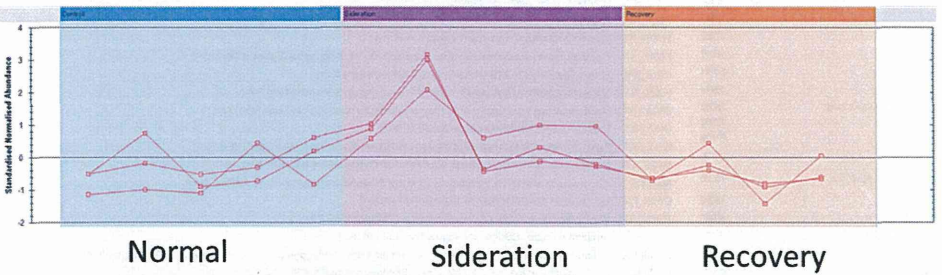


Japanese
Normal HuUrine

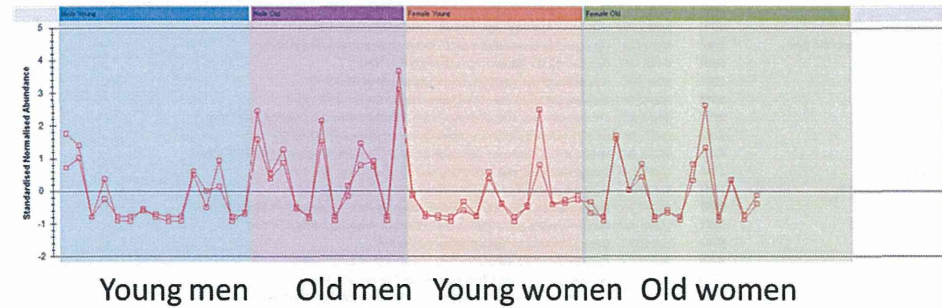


Caucasian
Normal HuUrine

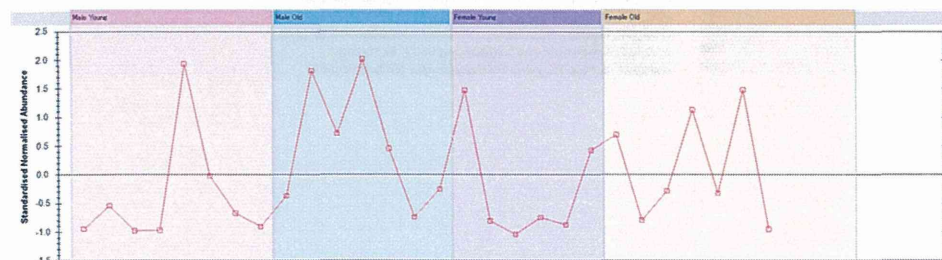
10. UPF0556 protein C19orf10



DILI
Japanese HuUrine



Japanese
Normal HuUrine



Caucasian
Normal HuUrine

表 1 薬物性肝障害患者由来尿サンプルのリスト

sample#	発症時尿	回復時尿	年齢	性別	原因薬物	タイプ
1	○	○	80	男	バクタ (スルファメトキサゾール/トリメトプリム)	肝細胞障害型
2	○	○	53	男	デパケン (バルプロ酸ナトリウム)	肝細胞障害型
3	○	○	69	女	ワーファリン (ワルファリン)	肝細胞障害型
4	○	○	54	女	メソトレキセート (メトトレキサート)	肝細胞障害型
5	○	○	63	男	カデュエット (アムロジピン・アトルバスタチン)、半夏瀉心湯	肝細胞障害型
6	○	○	77	女		

表 2 雄、雌特異的発現タンパク質

Male Specific Protein			Female Specific Protein		
Protein abbreviation	Protein Description	Protein mass	Protein abbreviation	Protein Description	Protein mass
SFBP_RAT	Prostatic spermine-binding protein OS=Rattus norvegicus GN=Sfp PE=1 SV=1	31232	BRCA2_RAT	Breast cancer type 2 susceptibility protein homolog OS=Rattus norvegicus GN=Brca2 PE=1 SV=1	376951
ZFP2_RAT	Cystatin-related protein 2 OS=Rattus norvegicus GN=Czp2 PE=2 SV=1	21456	DYH12_RAT	Dynein heavy chain 12, axonemal OS=Rattus norvegicus GN=Dyh12 PE=2 SV=2	355627
ZFP1_RAT	Cystatin-related protein 1 OS=Rattus norvegicus GN=Zfp1 PE=1 SV=1	21446	ITPR1_RAT	Inositol 1,4,5-trisphosphate receptor type 1 OS=Rattus norvegicus GN=Itp1 PE=1 SV=2	316486
TGM4_RAT	Protein-glutamine gamma-glutamyltransferase 4 OS=Rattus norvegicus GN=Tgm4 PE=1 SV=1	75966	SPTA2_RAT	Spectrin alpha chain, brain OS=Rattus norvegicus GN=Sptan1 PE=1 SV=2	285261
KACA_RAT	Ig kappa chain C region, A allele OS=Rattus norvegicus PE=1 SV=1	11896	MAP1B_RAT	Microtubule-associated protein 1B OS=Rattus norvegicus GN=Map1b PE=1 SV=2	270332
REG3G_RAT	Regenerating islet-derived protein 3 gamma OS=Rattus norvegicus GN=Reg3g PE=2 SV=1	19473	ACACA_RAT	Acetyl-CoA carboxylase 1 OS=Rattus norvegicus GN=Acaca PE=1 SV=1	266678
ACTS_RAT	Actin, alpha skeletal muscle OS=Rattus norvegicus GN=Acta1 PE=2 SV=1	42366	RCS_RAT	Proto-oncogene tyrosine-protein kinase RCS OS=Rattus norvegicus GN=Ros1 PE=2 SV=1	263884
PSC2_RAT	Prostatic steroid-binding protein C2 OS=Rattus norvegicus GN=Pscp2 PE=1 SV=1	13162	PLCE1_RAT	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase epsilon1 OS=Rattus norvegicus GN=Plec1 PE=1 SV=1	255595
LQNS_RAT	Epididymal-specific lipocalin5 OS=Rattus norvegicus GN=Lzn5 PE=1 SV=2	20628	TF3C1_RAT	General transcription factor 3C polypeptide 1 OS=Rattus norvegicus GN=Tf3c1 PE=1 SV=1	245004
SO1A1_RAT	Solute carrier organic anion transporter family member 1A1 OS=Rattus norvegicus GN=Slc1a1 PE=1 SV=1	75782	FA3A_RAT	Protein FAM3A OS=Rattus norvegicus GN=Fam3a PE=2 SV=2	233393
PSC1_RAT	Prostatic steroid-binding protein C1 OS=Rattus norvegicus GN=Pscp1 PE=1 SV=1	13398	OTOF_RAT	Otofelin OS=Rattus norvegicus GN=Otof PE=1 SV=2	227622
SVS2_RAT	Seminal vesicle secretory protein 2 OS=Rattus norvegicus GN=Svs2 PE=1 SV=1	45556	MYO6B_RAT	Myosin-Xb OS=Rattus norvegicus GN=Myo6b PE=1 SV=1	226390
DFB50_RAT	Beta-defensin 50 OS=Rattus norvegicus GN=Defb50 PE=3 SV=1	8180	MYH3_RAT	Myosin-3 OS=Rattus norvegicus GN=Myh3 PE=2 SV=1	224746
SG2A2_RAT	Secretoglobin family 2A member 2 OS=Rattus norvegicus GN=Sg2a2 PE=1 SV=1	11006	MYH4_RAT	Myosin-4 OS=Rattus norvegicus GN=Myh4 PE=2 SV=1	223693
MSMB_RAT	Beta-microseminoprotein OS=Rattus norvegicus GN=Mmb PE=1 SV=1	13311	PGCA_RAT	Aggrecan core protein OS=Rattus norvegicus GN=Acan PE=1 SV=2	222580
CATS_RAT	Cathepsin S OS=Rattus norvegicus GN=Cts PE=2 SV=1	37437	MYO16_RAT	Myosin-XVI OS=Rattus norvegicus GN=Myo16 PE=1 SV=1	213123
SMR1_RAT	SMR1 protein OS=Rattus norvegicus GN=Vcsl1 PE=1 SV=1	16017	PCSK6_RAT	Protein convertase subtilisin/kexin type 6 (Fragment) OS=Rattus norvegicus GN=Pcsk6 PE=2 SV=2	212487
AK1A1_RAT	Alcohol dehydrogenase [NADP+] OS=Rattus norvegicus GN=Ak1a1 PE=1 SV=2	36711	KIF1B_RAT	Kinesin-like protein KIF1B OS=Rattus norvegicus GN=Kif1b PE=1 SV=2	205411
LEGS_RAT	Galectin-5 OS=Rattus norvegicus GN=Lgals5 PE=1 SV=2	16414	PCO21_RAT	Nuclear pore membrane glycoprotein 210 OS=Rattus norvegicus GN=Pon210 PE=1 SV=1	203403
SO1A3_RAT	Solute carrier organic anion transporter family member 1A3 OS=Rattus norvegicus GN=Slc1a3 PE=2 SV=2	75385	BRCA1_RAT	Breast cancer type 1 susceptibility protein homolog OS=Rattus norvegicus GN=Brca1 PE=1 SV=1	203004
SVS4_RAT	Seminal vesicle secretory protein 4 OS=Rattus norvegicus GN=Svs4 PE=1 SV=1	12006	LKAP_RAT	Limkin-1 OS=Rattus norvegicus GN=Lkap PE=1 SV=1	195932
MMPB_RAT	Neutrophil collagenase OS=Rattus norvegicus GN=Mmp8 PE=2 SV=1	53528	SHL2_RAT	Signal-induced proliferation-associated 1-like protein 2 OS=Rattus norvegicus GN=Spa12 PE=2 SV=1	191930
FHT2_RAT	Lysosomal thioesterase FHT2 OS=Rattus norvegicus GN=Fht2 PE=2 SV=1	34675	MADD_RAT	MAP kinase-activating death domain protein OS=Rattus norvegicus GN=Madd PE=1 SV=1	179306
SO1A5_RAT	Solute carrier organic anion transporter family member 1A5 OS=Rattus norvegicus GN=Slc1a5 PE=2 SV=2	76096	ABCC8_RAT	ATP-binding cassette transporter sub-family C member 8 OS=Rattus norvegicus GN=Abcc8 PE=1 SV=4	176966
HBB1_RAT	Hemoglobin subunit beta-1 OS=Rattus norvegicus GN=Hbb PE=1 SV=3	16083	SYNJ1_RAT	Synapjanin-1 OS=Rattus norvegicus GN=Synj1 PE=1 SV=3	173670
DNS2B_RAT	Deoxyribonuclease-2 beta OS=Rattus norvegicus GN=Dnase2b PE=1 SV=1	40962	TOP2A_RAT	DNA topoisomerase 2-alpha OS=Rattus norvegicus GN=Top2a PE=2 SV=1	173353
ASMB_RAT	Acid sphingomyelinase-like phosphodiesterase 3a OS=Rattus norvegicus GN=Smpd3a PE=2 SV=1	50377	SLIT1_RAT	Slit homolog 1 protein OS=Rattus norvegicus GN=Slit1 PE=1 SV=1	173434
ARF1_RAT	ADP-ribosylation factor 1 OS=Rattus norvegicus GN=Arf1 PE=1 SV=2	20741	P3C23_RAT	Phosphatidylinositol-4-phosphate 3-kinase C2 domain-containing gamma polypeptide OS=Rattus norvegicus GN=Pik3cg PE=2 SV=1	173147
TERA_RAT	Transitional endoplasmic reticulum ATPase OS=Rattus norvegicus GN=Vcp PE=1 SV=3	69977	RERE_RAT	Arginine-glutamic acid dipeptide repeats protein OS=Rattus norvegicus GN=Rere PE=2 SV=2	172846
RAC1_RAT	Ras-related C3 botulinum toxin substrate 1 OS=Rattus norvegicus GN=Rac1 PE=1 SV=1	21836	MUC2_RAT	Mucin-2 (Fragment) OS=Rattus norvegicus GN=Muc2 PE=1 SV=1	172656
CRS1_RAT	Cysteine-rich secretory protein 1 OS=Rattus norvegicus GN=Crisp1 PE=2 SV=1	28741	NMDE2_RAT	Glutamate (NMDA) receptor subunit epsilon-2 OS=Rattus norvegicus GN=Gria2 PE=1 SV=1	167876
ENFP5_RAT	Ectonucleotide diphosphopyridophosphate/phosphodiesterase family member 5 OS=Rattus norvegicus GN=Erpp5 PE=1 SV=2	54483	MFRP_RAT	Multidrug resistance-associated protein 6 OS=Rattus norvegicus GN=Abcb6 PE=2 SV=1	166771
GSTM2_RAT	Glutathione S-transferase Mu 2 OS=Rattus norvegicus GN=Gstm2 PE=1 SV=2	25957	SYNJ2_RAT	Synapjanin-2 OS=Rattus norvegicus GN=Synj2 PE=1 SV=2	165414
GSTM4_RAT	Glutathione S-transferase Yb-3 OS=Rattus norvegicus GN=Gstm3 PE=1 SV=2	25636	NOS1_RAT	Nitric oxide synthase, brain OS=Rattus norvegicus GN=Nos1 PE=1 SV=1	161827
AKCL2_RAT	1,5-anhydro-D-fructose reductase OS=Rattus norvegicus GN=Akrl2 PE=2 SV=1	34783	ROCK2_RAT	Rho-associated protein kinase 2 OS=Rattus norvegicus GN=Rock2 PE=1 SV=1	160475
GSTM1_RAT	Glutathione S-transferase Mu 1 OS=Rattus norvegicus GN=Gstm1 PE=1 SV=2	26098	SHAN2_RAT	SH3 and multiple ankyrin repeat domains protein 2 OS=Rattus norvegicus GN=Shank2 PE=1 SV=2	156096
MYO1E_RAT	Myosin-Ie OS=Rattus norvegicus GN=Myo1e PE=2 SV=1	127374	DNMT1_RAT	Deleted in malignant brain tumors 1 protein OS=Rattus norvegicus GN=Dnmt1 PE=1 SV=1	156871
GAS7_RAT	Growth arrest-specific protein 7 OS=Rattus norvegicus GN=Gas7 PE=2 SV=2	46525	MED23_RAT	Mediator of RNA polymerase II transcription subunit 23 OS=Rattus norvegicus GN=Med23 PE=2 SV=2	156069
LRCS9_RAT	Leucine-rich repeat-containing protein 59 OS=Rattus norvegicus GN=Lrcc9 PE=1 SV=1	35334	CNTP1_RAT	Contactin-associated protein 1 OS=Rattus norvegicus GN=Cntnap1 PE=1 SV=1	156185
SO1A4_RAT	Solute carrier organic anion transporter family member 1A4 OS=Rattus norvegicus GN=Slc1a4 PE=2 SV=1	74657	MET_RAT	Hepatocyte growth factor receptor OS=Rattus norvegicus GN=Met PE=1 SV=1	156181
GBBS_RAT	Guanine nucleotide-binding protein subunit beta-5 OS=Rattus norvegicus GN=Grib5 PE=2 SV=1	39505	RBGRAT_RAT	Rab3 GTPase-activating protein non-catalytic subunit OS=Rattus norvegicus GN=Rab3gap2 PE=1 SV=2	155929
DDA11_RAT	NG,NG-dimethylarginine dimethylaminohydrolase 1 OS=Rattus norvegicus GN=Ddah1 PE=1 SV=3	31805	VGF3_RAT	Vascular endothelial growth factor receptor 3 OS=Rattus norvegicus GN=Flt4 PE=1 SV=1	155329
OMD_RAT	Osteomodulin OS=Rattus norvegicus GN=Omd PE=2 SV=1	50322	CSK1_RAT	Csk-1 OS=Rattus norvegicus GN=Csk1 PE=1 SV=1	150682
CAH1_RAT	Carbonic anhydrase 1 OS=Rattus norvegicus GN=Ca1 PE=1 SV=1	28336	PARD3_RAT	Partitioning defective 3 homolog OS=Rattus norvegicus GN=Par3 PE=1 SV=1	150041
ISK3_RAT	Serine protease inhibitor Kazal-type 3 OS=Rattus norvegicus GN=Spink3 PE=1 SV=2	8602	CD45_RAT	Leukocyte common antigen OS=Rattus norvegicus GN=Ptpcr PE=2 SV=2	144776
RB1B_RAT	Ras-related protein Rab-1B OS=Rattus norvegicus GN=Rab1b PE=2 SV=4	24588	RGRF1_RAT	Ras-specific guanine nucleotide-releasing factor 1 OS=Rattus norvegicus GN=Rasgf1 PE=1 SV=1	143774
FRRP_RAT	Froglidin F2 receptor negative regulator OS=Rattus norvegicus GN=Frrp PE=1 SV=1	99636	SMC1A_RAT	Structural maintenance of chromosomes protein 1A OS=Rattus norvegicus GN=Smc1a PE=1 SV=1	143743
RGN_RAT	Regucalcin OS=Rattus norvegicus GN=Rgn PE=1 SV=3	33636	MDR1_RAT	Multidrug resistance protein 1 OS=Rattus norvegicus GN=Abcb1 PE=2 SV=1	141926
MYO1B_RAT	Myosin-Ib OS=Rattus norvegicus GN=Myo1b PE=2 SV=1	132881	L1CAM_RAT	Neural cell adhesion molecule L1 OS=Rattus norvegicus GN=L1cam PE=2 SV=3	141816
GFYS_RAT	Epididymal secretory glutathione peroxidase OS=Rattus norvegicus GN=Gpx5 PE=2 SV=1	25596	SYN_C	Valyl-RNA synthetase OS=Rattus norvegicus GN=Iars PE=2 SV=2	141535
LRRC7_RAT	Leucine-rich repeat-containing protein 7 OS=Rattus norvegicus GN=Lrrc7 PE=1 SV=1	166696	CLAP2_RAT	CLIP-associated protein 2 OS=Rattus norvegicus GN=Clap2 PE=2 SV=1	141463

表 3 絶食期間により発現の上昇するタンパク質

Accession	Peptides	Anova (p)	Max fold	Description
ALBU_RAT	66	0.00909	4.74	Serum albumin
PSC2_RAT	4	0.00479	3.41	Prostatic steroid-binding protein C2
MOES_RAT	17	0.00183	3.24	Moesin
ARK73_RAT	4	0.04016	2.84	Aflatoxin B1 aldehyde reductase member 3
APOH_RAT	5	0.02499	2.60	Beta-2-glycoprotein 1
TCO2_RAT	6	0.00099	2.50	Transcobalamin-2
AADAT_RAT	4	0.00502	2.44	Kynurenine/alpha-aminoadipate aminotransferase mitochondrial
ACTC_RAT	7	0.03024	2.38	Actin, alpha cardiac muscle 1
NHRF1_RAT	12	0.03024	2.11	Na(+)/H(+) exchange regulatory cofactor NHE-RF1

表4 日本人のコントロールサンプルのばらつきの要因となるペプチドとその同定スコア

	Prot Description Right side PCA	Score	Accession		Prot Description - Left side PCA	Score	Accession
1368	Alpha-1B-glycoprotein	68.41	A1BG_HUMAN	2025	Amyloid beta A4 protein	48.5	A4_HUMAN
4046	Alpha-amylase 1	86.35	AMY1_HUMAN	12159	Basement membrane-specific heparan sulfate proteoglycan	51.98	PGBM_HUMAN
1094	Alpha-amylase 2B	57.22	AMY2B_HUMAN	6813	Bone morphogenetic protein 3B	41.54	BMP3B_HUMAN
15586	Alpha-N-acetylglicosaminidase	54.66	ANAG_HUMAN	4324	CD320 antigen	53.84	CD320_HUMAN
1616	Apolipoprotein D	108.02	APOD_HUMAN	571	GD44 antigen	42.46	GD44_HUMAN
4092	Biotinidase	94.95	BTD_HUMAN	149	CD59 glycoprotein	83.94	CD59_HUMAN
9042	Complement C1r subcomponent-like protein	40.23	C1RL_HUMAN	6153	Collagen alpha-1(I) chain	75	CO1A1_HUMAN
11384	Cubilin	50.12	CUBN_HUMAN	17495	Collagen alpha-1(XXVIII) chain	56.67	COSA1_HUMAN
8912	Endonuclease domain-containing 1 protein	43.37	ENDD1_HUMAN	7602	Delta and Notch-like epidermal growth factor-related receptor 3	63.2	DNER_HUMAN
5205	Extracellular superoxide dismutase [Cu-Zn]	64.62	SODE_HUMAN	1779	Ecto-ADP-ribosyltransferase 3	53.13	NAR3_HUMAN
1173	Fibrinogen alpha chain	50.88	FIBA_HUMAN	180	Extracellular sulfatase Sulf-2	85.3	SULF2_HUMAN
5060	Galectin-3-binding protein	47.51	LG3BP_HUMAN	6359	IGF-like family receptor 1	46.5	IGFR1_HUMAN
1116	Hemopexin	51.37	HEMO_HUMAN	4033	Immunoglobulin superfamily containing leucine-rich repeats	48.95	ISLR_HUMAN
303	Ig gamma-4 chain C region	71.4	IGHG4_HUMAN	9131	Integrin beta-1	49.65	ITB1_HUMAN
186	Ig kappa chain C region	66.85	IGKC_HUMAN	3725	Kunitz-type protease inhibitor 2	42	SPIT2_HUMAN
4480	Ig kappa chain V-I region Roy	41.95	KV116_HUMAN	2468	Membrane protein FAM174A	45.04	F174A_HUMAN
7390	Ig kappa chain V-III region VG (Fragment)	40.04	KV309_HUMAN	216	Phosphoinositide-3-kinase-interacting protein 1	69.04	P3IP1_HUMAN
3552	Ig kappa chain V-III region WOL	50.22	KV305_HUMAN	8895	Plasma protease C1 inhibitor	57.84	IC1_HUMAN
625	Ig lambda chain V-III region LOI	46.42	LV302_HUMAN	10320	Platelet-derived growth factor subunit B	63.46	PDGFB_HUMAN
172	Ig lambda-2 chain C regions	86.08	LAC2_HUMAN	12762	Prolow-density lipoprotein receptor-related protein 1	52.61	LRP1_HUMAN
10615	Inter-alpha-trypsin inhibitor heavy chain H4	58.45	ITIH4_HUMAN	8801	Prostaglandin E2 receptor EP3 subtype	53.37	PE2R3_HUMAN
6326	Leucine-rich alpha-2-glycoprotein	48.77	A2GL_HUMAN	11811	Protein HEG homolog 1	52.28	HEG1_HUMAN
39577	Low-density lipoprotein receptor-related protein 1	46.31	LRP2_HUMAN	1186	Protein NOV homolog	111.46	NOV_HUMAN
3934	Monocyte differentiation antigen CD14	51.21	CD14_HUMAN	6919	Protein YIPF3	58.67	YIPF3_HUMAN
21072	Neogenin	47.4	NEO1_HUMAN	916	Sarcoplasmic reticulum histidine-rich calcium-binding protein	40.38	SRCH_HUMAN
6864	Neuronal growth regulator 1	58.58	NEGR1_HUMAN	4161	Sodium/nucleoside cotransporter 1	65.71	S28A1_HUMAN
1580	Pancreatic alpha-amylase	88.92	AMYP_HUMAN	1102	Syndecan-1	81.24	SDC1_HUMAN
22568	Receptor-type tyrosine-protein phosphatase gamma	41.02	PTPRG_HUMAN	4109	Tenascin-X	80.07	TENX_HUMAN
22079	Sialate O-acetyltransferase	44.91	SIAE_HUMAN	1273	Thrombospondin-1	96.9	TSP1_HUMAN
9035	Sulfhydryl oxidase 1	46.02	QSOX1_HUMAN	1177	Tumor necrosis factor receptor superfamily member 1B	83.76	TNRF1_HUMAN
681	Vesicular integral-membrane protein VIP36	80.83	LMAN2_HUMAN	5437	Tumor-associated calcium signal transducer 2	63.93	TACD2_HUMAN
				289	WAP four-disulfide core domain protein 2	89.2	WFDG2_HUMAN
				8627	Xylosyltransferase 1	50.04	XYLT1_HUMAN

表5 白人コントロールのばらつきの要因となるペプチドとその同定スコア

	Prot Description - Right side PCA	Score	Accession		Prot Description - Left side PCA	Score	Accession
7861	Alpha-1-antichymotrypsin	62.06	AACT_HUMAN	8084	Amyloid beta A4 protein	72.93	A4_HUMAN
9755	Alpha-1B-glycoprotein	116.16	A1BG_HUMAN	14097	Asialoglycoprotein receptor 1	79.5	ASGR1_HUMAN
16254	Alpha-N-acetylglicosaminidase	53.6	ANAG_HUMAN	4051	Basement membrane-specific heparan sulfate proteoglycan	79.67	PGBM_HUMAN
8290	Biotinidase	94.15	BTD_HUMAN	11803	Basigin	52.94	BASI_HUMAN
10024	Complement C1r subcomponent-like protein	54.41	C1RL_HUMAN	20304	Cadherin-2	43.14	CADH2_HUMAN
6496	Corticosteroid-binding globulin	75.73	CBG_HUMAN	7551	CD209 antigen	59.53	CD209_HUMAN
6001	Endonuclease domain-containing 1 protein	59.78	ENDD1_HUMAN	65	CD59 glycoprotein	61.29	CD59_HUMAN
7819	Gamma-glutamyltranspeptidase 2	61.13	GGT2_HUMAN	10352	CD99 antigen-like protein 2	68.88	C99L2_HUMAN
7704	Hemopexin	71.29	HEMO_HUMAN	4260	Collagen alpha-1(I) chain	72.45	CO1A1_HUMAN
1235	Ig alpha-1 chain C region	99.2	IGHA1_HUMAN	1387	Complement decay-accelerating factor	67.86	DAF_HUMAN
803	Ig kappa chain V-III region VG (Fragment)	67.47	KV309_HUMAN	10156	Desmoglein-1	82.21	DSG1_HUMAN
2731	Inter-alpha-trypsin inhibitor heavy chain H4	69.15	ITIH4_HUMAN	2552	Dihydrodipicolylsine-residue succinyltransferase complex	62	ODO2_HUMAN
360	Kininogen-1	60.13	KNG1_HUMAN	2359	Di-N-acetylchitinase	42.43	DIAC_HUMAN
2792	Leucine-rich alpha-2-glycoprotein	58.84	A2GL_HUMAN	575	Endosialin	49.96	CD248_HUMAN
7357	Plasma protease C1 inhibitor	108.1	IC1_HUMAN	117	Extracellular sulfatase Sulf-2	71.82	SULF2_HUMAN
2569	Polymeric immunoglobulin receptor	66.99	PIGR_HUMAN	7598	Fibroblast growth factor receptor 1	74.79	FGFR1_HUMAN
4297	Pro-epidermal growth factor	43.17	EGF_HUMAN	24890	Fibronectin	112.91	FN1_HUMAN
1521	Serotransferrin	100.48	TRFE_HUMAN	15569	Homerin	74.97	HORN_HUMAN
4441	Transferrin	72.28	TTFY_HUMAN	27629	Junction plakoglobin	49.88	PLAK_HUMAN
3621	Vasorin	84.63	VASN_HUMAN	1959	Membrane protein FAM174A	50.89	F174A_HUMAN
834	Vesicular integral-membrane protein VIP36	60.43	LMAN2_HUMAN	22770	Multimerin-2	56.91	MMRN2_HUMAN
				4339	Neurosecretory protein VGF	61.87	VGFB_HUMAN
				1322	Peptidase inhibitor 15	51.18	PI15_HUMAN
				44	Phosphoinositide-3-kinase-interacting protein 1	115.93	P3IP1_HUMAN
				21693	Prostaglandin E2 receptor EP3 subtype	58.78	PE2R3_HUMAN
				1704	Protein shisa-5	69.38	SHSA5_HUMAN
				2044	Secretogranin-1	94.85	SCG1_HUMAN
				9048	Sodium/nucleoside cotransporter 1	58.24	S28A1_HUMAN
				16909	Sulfhydryl oxidase 1	41.62	QSOX1_HUMAN
				1556	Syndecan-1	63.94	SDC1_HUMAN
				11789	Tenascin-X	74.88	TENX_HUMAN
				3068	Thrombospondin-1	110.26	TSP1_HUMAN
				26043	Thrombospondin-4	59.71	TSP4_HUMAN
				1882	Trefoil factor 3	48.86	TFF3_HUMAN
				2537	Tumor necrosis factor receptor superfamily member 1B	76.3	TNRF1_HUMAN
				12541	Tumor-associated calcium signal transducer 2	63.56	TACD2_HUMAN