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APPENDICES

APPENDIX A

List of expressed genes after white spot syndrome virus challenge at different time points

WSSV challenge at 6 hpi

Description	Fold change	Description	Fold change
40s ribosomal protein S24	10.35	mitochondrial genome, partial 3' end	1.04
asialoglycoprotein recepter	7.12	ribosomal protein S25	1.04
cellular nucleic acid binding protein	5.05	actin 1	1.03
tubulin beta-1 chain	4.70	ribosomal protein S27a	1.03
60S ribosomal protein L27	4.62	INNEXIN INX3	1.03
60S ribosomal protein L7A	4.30	clottable protein	1.03
elongation factor 2	4.24	60s ribosomal protein L39	1.03
von Hippel-Lindau binding protein 1	3.67	mitochondrial 1rRNA gene, partial 3' end	1.02
40S ribosomal protein S9	3.43	ubiquitin and ribosomal protein S27a	1.02
cytosolic manganese superoxide dismutase percursor	3.41	60S ribosomal protein L7	1.02
b-actin	3.17	40S ribosomal protein S	1.01
40s ribosomal protein S25	3.06	integral membrance protein 2A	1.01
60S ribosomal protein L38	2.98	60S ribosomal protein L18A	0.99
60Sacidic ribosomal protein P2	2.78	myosin regulatory light chain	0.99
40s ribosomal protein S10	2.61	40S ribosomal protein	0.98
60s acidic ribosomal protein P2	2.59	14-3-3-like protein	0.98
RpS25 gene product	2.55	ubiquitin-like protein / ribosomal protein S30	0.98
40S ribosomal protein S19	2.30	40S ribosomal protein S12	0.97
60S ribosomal protein L6	2.22	selenoprotein w muscle 1	0.96
40s ribosomal protein s7	1.94	60S ribosomal protein L19	0.96
gamma-aminobutyric acid (GABA-A) receptor	1.85	60S ribosomal protein L10A	0.96
60s ribosomal protein L22	1.75	S3 ribosomal protein	0.96
ATPase subunit 6	1.71	60Sacidic ribosomal protein P2	0.95
SPARC-related protein	1.67	40S ribosomal protein S24	0.95
heat shock cognate 70 kDa protein	1.51	QM protein	0.95
eukaryotic translation initiation factor 3, subunit 2	1.45	double stranded RNA binding nuclear protein, ILF3	0.95
AEMTAN56 Aedes aegypti MT pSPORT library clone56 5'	1.40	60S ribosomal protein	0.94
		putative large subunit ribosomal protein rpL 44	0.93
ribosomal protein L30	1.35	16S rRNA gene	0.92
calcium-sensitive chloride channel 2	1.34	ribosomal protein S8	0.91
Prophenoloxidase activating factor	1.33	ribosomal protein S12	0.91
Na/K-ATPase beta subunit isoform 3	1.31	Ef2b gene product	0.90
acyl coenzyme A dehydrogenase, long chain	1.31	ribosomal protein L28	0.90
RpS 9 gene product	1.27	5S ribosomal protein	0.90
tubulin beta-1 chain	1.24	alpha-2-tubulin	0.90
RpL46 gene product	1.22	mitochondrial rRNA gene	0.89
ribosomal protein S18	1.22	ATP synthase FO subunit 6	0.89
60a ribosomal protein L27A	1.21	hypothetical protein 18K protein	0.89
16S ribosomal RNA gene	1.21	actin, cytoplasmic A3	0.89
40S ribosomal protein S20	1.20	16S rRNA gene	0.88
gene MAC25 protein	1.20	b-actin	0.88
ribosomal protein S17	1.20	hypothetical 36.9 kDa protein	0.88
11.5 kDa antibacterial protein	1.18	mitochondrial, complete genome	0.88
ribosomal protin eL12	1.18	ribosomal protein L18a	0.88
ATP synthase subunit C	1.18	60S ribosomal protein L14	0.88
hypothetical protein F26E4.9	1.17	beta - actin	0.88
translationally controlled tumor protein homolog	1.16	gene MAC25 protein	0.88
calmodulin	1.16	hypothetical protein	0.87
ribosomal protein L24	1.15	ribosomal protein L31	0.87
ATPsyn-gamma gene product	1.15	40S ribosomal protien S4	0.87
Rat insulinoma gene-Rig	1.14	16S ribosomal RNA gene	0.85
60s ribosomal protein L13	1.13	alpha-tubulin	0.85
Fc fragment of IgE, low affinity II	1.13	40S ribosomal protein S3a	0.85
ribosomal protein S5	1.12	16S rRNA gene	0.85
40S ribosomal protein S15A	1.11	cytochrome c oxidase subunit I	0.84
60S ribosomal protein L19	1.08	5S ribosomal protein	0.84
16S rRNA gene	1.05	NADH ubiquinone oxidoreductase chain 6	0.84
NADH dehydrogenase subunit 4	1.05	beta tub 56D gene product (alt1)	0.84
60S ribosomal protein L34	1.04	ribosomal protein L26	0.83
16S rRNA gene	1.04	40S ribosomal protein S16	0.82
		actin	0.81

WSSV challenge at 6 hpi (continue)

Description	Fold change	Description	Fold change
nucleoside diphosphate kinase	0.81	neuronal apoptosis inhibitory protein	0.75
40S ribosomal protein S32	0.81	hypothetical protein F08F1.8	0.74
cytochrome c oxidase subunit VIIc	0.81	Penaeidin-2 precusor	0.74
ribosomal protein S15	0.80	agrin precursor	0.73
40s ribosomal protein S11	0.80	histone 1	0.73
partial mitochondrial 16S rRNA gene	0.80	asialoglycoprotein recepter	0.72
16S rRNA gene	0.79	calponin homolog	0.72
guanine nucleotide-binding protein beta subunit	0.79	RpL 19 gene product	0.71
60S ribosomal protein L17	0.79	actin related protein	0.71
H3	0.78	heterogeneous ribonucleoprotein A, A2,B1	0.70
Guanine nucleotide-binding protein gamma-2	0.78	tubulin alpha-1 chain	0.69
hemocyte protein-glutamine gamma-		gamma-actin	0.69
glutamyltransferase	0.77	H3 histone	0.69
60S ribosomal protein L37A	0.77	stromelysin-3 precursor	0.69
elongation factor 2	0.77	arginine kinase	0.68
penaeidin-3k	0.76	cytoplasmic beta chain	0.65
actin 3	0.75	low-density lipoprotein receptor relate protein -	0.65
probable reverse transcriptase	0.75	profilin	0.62
		CG6848 gene product	0.57
		kupffer cell receptor	0.43

WSSV challenge at 24 hpi

Description	Fold change	Description	Fold change
60S ribosomal protein L34	24.10	RpL46 gene product	1.51
ribosomal protein L30	21.66	5S ribosomal protein	1.51
14-3-3-like protein	19.33	RpS 9 gene product	1.49
Rat insulinoma gene-Rig	8.92	translocon-associated protein	1.45
asialoglycoprotein recepter	8.72	heat shock cognate 70 kDa protein	1.44
ribosomal protin eL12	7.51	ribosomal protein L31	1.43
calmodulin	7.20	tubulin beta-1 chain	1.43
60s ribosomal protein L13	6.16	40S ribosomal protein S	1.43
60S ribosomal protein L7A	5.80	16S ribosomal RNA gene	1.41
60a ribosomal protein L27A	5.37	histone 1	1.39
proteasome subunit beta type 2	4.49	AEMTAN56 Aedes aegypti MT pSPORT	
calmodulin	4.06	library clone56 5'	1.37
QM protein	3.84	beta - actin	1.32
chain H, cytochrome Bc1 complex	3.81	mitochondrial genome, partial 3' end	1.25
calcium-sensitive chloride channel 2	3.27	clottable protein	1.24
ATP synthase alpha chain, mitochondrial		60S ribosomal protein	1.22
precursor	3.24	neuronal apoptosis inhibitory protein	1.22
asialoglycoprotein recepter	3.16	tubulin beta-1 chain	1.21
60Sacidic ribosomal protein P2	3.02	ferritin 2 light chain homolog	1.21
60S ribosomal protein L7A	2.90	ribosomal protein S28	1.20
S3 ribosomal protein	2.68	ribosomal protein S12	1.19
40S ribosomal protein S27	2.65	40s ribosomal protein S11	1.14
ribosomal protein S18	2.52	INNEXIN INX3	1.14
integral membrance protein 2A	2.39	translationally controlled tumor protein	
40s ribosomal protein S10	2.37	homolog	1.13
cytochrome c oxidase subunit VIIc	2.24	ribosomal protein S15	1.11
ribosomal protein S5	2.19	guanine nucleotide-binding protein beta	
60S ribosomal protein L19	2.16	subunit	1.09
60S ribosomal protein L6	2.10	60S ribosomal protein L7	1.08
ribosomal protein L28	1.92	H3	1.07
double stranded RNA binding nuclear		RpL 19 gene product	1.06
protein, ILF3	1.92	40S ribosomal protein S20	1.05
ATP synthase subunit C	1.89	nucleoside diphosphate kinase	1.05
60S ribosomal protein L18A	1.86	40S ribosomal protein S16	1.00
60Sacidic ribosomal protein P2	1.82	40S ribosomal protien S4	1.00
40S ribosomal protein	1.81	elongation factor 2	1.00
ribosomal protein S27a	1.79	5S ribosomal protein	0.99
ribosomal protein L24	1.76	40S ribosomal protein S32	0.99
ubiquitin and ribosomal protein S27a	1.70	eukaryotic translation initiation factor 3, subunit 2	0.98
60s ribosomal protein L39	1.70	60S ribosomal protein L37A	0.98
60S ribosomal protein L10A	1.66	ubiquitin-like protein / ribosomal protein S30	0.95
60S ribosomal protein L19	1.57	alpha-tubulin	0.93
Na/K-ATPase beta subunit isoform 3	1.51	ribosomal protein S8	0.92

WSSV challenge at 24 hpi (continue)

Description	Fold change	Description	Fold change
ribosomal protein L26	0.91	selenoprotein w muscle 1	0.61
heterogeneous ribonucleoprotein A, A2,B1	0.89	Ef2b gene product	0.60
profilin	0.89	16S rRNA gene	0.60
16S rRNA gene	0.88	mitochondrial 1rRNA gene, partial 3' end	0.60
40S ribosomal protein S24	0.87	NADH ubiquinone oxidoreductase chain 6	0.58
hypothetical 36.9 kDa protein	0.86	hypothetical protein F08F1.8	0.57
40S ribosomal protein S3a	0.86	kupffer cell receptor	0.57
myosin regulatory light chain	0.85	H3 histone	0.56
cytochrome c oxidase subunit I	0.84	arginine kinase	0.54
actin, cytoplasmic A3	0.83	16S ribosomal RNA gene	0.54
60s ribosomal protein	0.81	60S ribosomal protein L17	0.51
16S rRNA gene	0.81	low-density lipoprotein receptor relate protein -	0.51
60S ribosomal protein L14	0.76	hypothetical protein	0.49
putative large subunit ribosomal protein rpL 44	0.74	beta tub 56D gene product (alt 1)	0.47
16S rRNA gene	0.73	gene MAC25 protein - human	0.42
ATP synthase FO subunit 6	0.73	CG6848 gene product	0.38
stromelysin-3 precursor	0.71	actin related protein	0.34
calponin homolog	0.70	hemocyte protein-glutamine gamma-glutamyltransferase	0.34
mitochondrial rRNA gene	0.70	tubulin alpha-1 chain	0.26
actin	0.68	gene MAC25 protein	0.21
gamma-actin	0.68	probable reverse transcriptase	0.13
mitochondrial, complete genome	0.67	Penaeidin-2 precusor	0.07
actin 3	0.66	agrin precursor	0.07
cytoplasmic beta chain	0.63	penaeidin-3k	0.06
16S rRNA gene	0.62	11.5 kDa antibacterial protein	0.06
partial mitochondrial 16S rRNA gene	0.61		

WSSV challenge at 48 hpi

Description	Fold change	Description	Fold change
translocon-associated protein	24.33	asialoglycoprotein receptor	1.87
calmodulin	22.90	60S ribosomal protein L19	1.83
tubulin beta-1 chain	15.54	ribosomal protein S17	1.73
60S ribosomal protein L7A	7.85	40S ribosomal protein S20	1.72
ribosomal protin eL12	6.70	CG6848 gene product	1.71
arginine kinase	6.41	beta - actin	1.68
60S ribosomal protein L34	6.15	S3 ribosomal protein	1.64
60S ribosomal protein L10A	5.85	beta tub 56D gene product (alt 1)	1.57
60a ribosomal protein L27A	4.90	eukaryotic translation initiation factor 3, subunit 2	1.56
myosin regulatory light chain	4.87	double stranded RNA binding nuclear protein, ILF3	1.54
ribosomal protein S18	4.81	40S ribosomal protein S3a	1.52
40S ribosomal protein	4.56	putative large subunit ribosomal protein rpL 44	1.52
elongation factor 2	4.45	Elongation factor-1 beta	1.51
alpha-2-tubulin	4.24	16S rRNA gene	1.51
ribosomal protein S5	4.23	60S ribosomal protein L7	1.50
ubiquitin-like protein / ribosomal protein S30	3.97	cytoplasmic beta chain	1.49
actin 1	3.86	actin	1.48
H3	3.66	RpL46 gene product	1.47
60Sacidic ribosomal protein P2	3.65	ubiquitin and ribosomal protein S27a	1.47
60s ribosomal protein L13	3.33	40S ribosomal protien S4	1.45
ribosomal protein L24	3.22	calcium-sensitive chloride channel 2	1.45
integral membrance protein 2A	3.04	60Sacidic ribosomal protein P2	1.42
40S ribosomal protein S24	2.83	calponin homolog	1.38
ribosomal protein S28	2.73	ribosomal protein L28	1.38
alpha-tubulin	2.47	actin 3	1.36
actin, cytoplasmic A3	2.40	ribosomal protein L18a	1.36
60S ribosomal protein L6	2.33	heterogeneous ribonucleoprotein A, A2,B1	1.28
hemocyte protein-glutamine gamma-glutamyltransferase	2.32	cytochrome c oxidase subunit VIIc	1.23
acyl coenzyme A dehydrogenase, long chain	2.29	clottable protein	1.22
40s ribosomal protein s7	2.21	60S ribosomal protein -like	1.22
14-3-3-like protein	2.17	RpL 19 gene product	1.18
QM protein	2.11	ribosomal protein S27a	1.16
hypothetical 36.9 kDa protein	2.00		
gamma-actin	1.90		

WSSV challenge at 48 hpi (continue)

Description	Fold change	Description	Fold change
cytochrome c oxidase subunit I	1.16	AEMTAN56 Aedes aegypti MT pSPORT	
hypothetical protein	1.14	library clone56 5'	0.80
gene MAC25 protein	1.14	60S ribosomal protein L14	0.78
5S ribosomal protein	1.13	histone I	0.76
60S ribosomal protein L18A	1.10	Anti lipopolysaccharide factor (ALF)	0.72
40S ribosomal protein S15A	1.09	Ef2b gene product	0.68
ribosomal protein S15	1.09	elongation factor 2	0.68
ribosomal protein S12	1.08	selenoprotein w muscle I	0.63
40S ribosomal protein S27	1.08	neuronal apoptosis inhibitory protein	0.59
40S ribosomal protein S32	1.06	16S rRNA gene	0.59
RpS 9 gene product	1.03	NADH ubiquinone oxidoreductase chain 6	0.57
ribosomal protein L31	1.01	16S ribosomal RNA gene	0.55
nucleoside diphosphate kinase	0.98	mitochondrial genome, partial 3' end	0.51
60S ribosomal protein L19	0.98	mitochondrial lrRNA gene, partial 3' end	0.48
40S ribosomal protein S12	0.97	mitochondrial rRNA gene	0.48
ribosomal protein S25	0.94	16S rRNA gene	0.47
60S ribosomal protein L17	0.93	gene MAC25 protein	0.46
ribosomal protein S8	0.92	partial mitochondrial 16S rRNA gene	0.46
tubulin alpha-1 chain	0.92	mitochondrial, complete genome	0.46
ribosomal protein L26	0.91	probable reverse transcriptase	0.46
translationally controlled tumor protein		16S rRNA gene	0.45
homolog	0.90	profilin	0.44
guanine nucleotide-binding protein beta		16S rRNA gene	0.43
subunit	0.90	40S ribosomal protein S	0.42
40S ribosomal protein S16	0.89	16S ribosomal RNA gene	0.41
5S ribosomal protein	0.89	actin related protein	0.31
H3 histone	0.87	agrin precursor	0.23
60S ribosomal protein L37A	0.85	11.5 kDa antibacterial protein	0.12
SPARC-related protein	0.85	Penaeidin-2 precusor	0.10
ATP synthase FO subunit 6	0.82	Penaeidin-3k	0.10
		cytochrome c oxidase subunit 2	0.06

WSSV challenge at 72 hpi

Description	Fold change	Description	Fold change
calmodulin	20.78	60a ribosomal protein L27A	2.44
60S ribosomal protein L14	18.57	H3 histone	2.43
60S ribosomal protein L34	17.51	40S ribosomal protein S27	2.42
putative large subunit ribosomal protein		ribosomal protin eL12	2.27
rpL 44	17.35	actin 3	2.24
60S ribosomal protein L7A	15.35	60S ribosomal protein L19	2.22
gene MAC25 protein	15.28	40S ribosomal protien S4	2.22
heat shock cognate 70 kDa protein	13.78	ribosomal protein S5	2.21
ribosomal protein L31	12.42	40S ribosomal protein S32	2.04
cytoplasmic beta chain	12.37	60S ribosomal protein L6	1.93
ribosomal protein L28	12.08	ribosomal protein S15	1.82
40S ribosomal protein	11.01	ribosomal protein S25	1.75
beta tub 56D gene product (alt 1)	6.50	mitochondrial rRNA gene	1.67
hypothetical protein F08F1.8	6.44	ribosomal protein S28	1.65
60S ribosomal protein L37A	5.34	RpS 9 gene product	1.60
16S rRNA gene	5.08	ubiquitin and ribosomal protein S27a	1.53
60S ribosomal protein L10A	3.96	RpL46 gene product	1.48
ATP synthase FO subunit 6	3.74	60S ribosomal protein L7A	1.47
ubiquitin-like protein / ribosomal protein S30	3.52	probable reverse transcriptase	1.45
60Sacidic ribosomal protein P2	3.27	60S ribosomal protein L7	1.22
heterogeneous ribonucleoprotein A, A2,B1	3.20	16S rRNA gene	1.20
beta - actin	3.10	kupffer cell receptor	1.18
5S ribosomal protein	3.00	ribosomal protein S8	1.14
40S ribosomal protein S3a	2.99	16S ribosomal RNA gene	1.13
nucleoside diphosphate kinase	2.96	40S ribosomal protein S24	1.12
40s ribosomal protein S10	2.86	asialoglycoprotein recepter	1.09
60S ribosomal protein -like	2.72	60S ribosomal protein L18A	0.99
H3	2.66	asialoglycoprotein receptor	0.95
60Sacidic ribosomal protein P2	2.60	40S ribosomal protein S20	0.93
double stranded RNA binding nuclear		cytochrome c oxidase subunit I	0.90
protein, ILF3	2.59	16S rRNA gene	0.87

WSSV challenge at 72 hpi (continue)

Description	Fold change	Description	Fold change
60S ribosomal protein L17	0.86	hypothetical protein	0.54
translationally controlled tumor protein homolog	0.80	histone 1	0.49
translocon-associated protein	0.75	16S rRNA gene	0.49
40S ribosomal protein S16	0.67	eukaryotic translation initiation factor 3,	
mitochondrial, complete genome	0.65	subunit 2	0.47
16S rRNA gene	0.62	mitochondrial 1rRNA gene, partial 3' end	0.40
selenoprotein w muscle 1	0.62	NADH ubiquinone oxidoreductase chain 6	0.33
mitochondrial genome, partial 3' end	0.61	11.5 kDa antibacterial protein	0.27
ribosomal protein L26	0.61	CG6848 gene product	0.14
Ef2b gene product	0.61	cytochrome c oxidase subunit VIIc	0.13
profilin	0.59	Penaeidin-2 precusor	0.10
tubulin alpha-1 chain	0.58	penaeidin-3k	0.10

List of expressed genes after *V. harveyi* challenge at different time points.

***V. harveyi* challenge at 6 hpi**

Description	Fold change	Description	Fold change
arginine kinase	21.85	11.5 kDa antibacterial protein	0.85
selenoprotein w muscle 1	16.87	ubiquitin and ribosomal protein S27a	0.84
actin 1	13.00	40S ribosomal protein S24	0.76
cytoplasmic beta chain	11.44	mitochondrial, complete genome	0.76
60s ribosomal protein L13	10.80	SPARC-related protein	0.72
beta - actin	10.11	60S ribosomal protein L37A	0.71
tubulin beta-1 chain	7.34	ribosomal protein S8	0.69
60s ribosomal protein L39	5.31	asialoglycoprotein receptor	0.69
60S ribosomal protein L6	4.80	H3 histone	0.68
calmodulin	4.67	ubiquitin-like protein / ribosomal protein S30	0.66
actin, cytoplasmic A3	3.74	actin 3	0.65
60S ribosomal protein L7A	3.57	histone 1	0.64
16S ribosomal RNA gene	3.20	H3	0.60
Na/K-ATPase beta subunit isoform 3	3.12	RpS 9 gene product	0.59
gamma-actin	2.59	ATP synthase subunit C	0.57
60S ribosomal protein L19	2.27	ribosomal protein L26	0.56
tubulin beta-1 chain	2.09	RpL46 gene product	0.55
actin	2.01	60S ribosomal protein L18A	0.53
gene MAC25 protein	1.98	ribosomal protein S25	0.51
16S rRNA gene	1.95	actin related protein	0.42
40S ribosomal protein S3a	1.94	alpha-tubulin	0.41
hypothetical protein	1.94	tubulin alpha-1 chain	0.40
kupffer cell receptor	1.90	40S ribosomal protein S27	0.39
beta tub 56D gene product (alt 1)	1.83	dynein light chain, cytoplasmic	0.39
hypothetical protein F08F1.8	1.75	nucleoside diphosphate kinase	0.36
Penaeidin-2 precusor	1.68	mitochondrial 1rRNA gene, partial 3' end	0.34
gene MAC25 protein	1.63	16S rRNA gene	0.34
AEMTAN56	1.56	40S ribosomal protien S4	0.29
60S ribosomal protein L7	1.52	16S rRNA gene	0.28
ribosomal protein L30	1.50	16S rRNA gene	0.27
60S ribosomal protein L19	1.38	cytochrome c oxidase subunit VIIc	0.23
40S ribosomal protein S16	1.35	NADH dehydrogenase subunit 4	0.23
cytochrome c oxidase subunit I	1.22	Ef2b gene product	0.22
penaeidin-3k	1.08	ribosomal protein S28	0.21
ATP synthase FO subunit 6	1.06	mitochondrial genome, partial 3' end	0.21
probable reverse transcriptase	1.05	16S rRNA gene	0.18
profilin	1.02	ribosomal protein L37	0.16
translocon-associated protein	1.00	5S ribosomal protein	0.16
40S ribosomal protein S15A	0.95	60S ribosomal protein L14	0.15
60S ribosomal protein	0.94	40S ribosomal protein S20	0.14
heat shock cognate 70 kDa protein	0.92	putative large subunit ribosomal protein rpL 44	0.14
ribosomal protein L31	0.87	heterogeneous ribonucleoprotein A, A2,B1	0.13
translationally controlled tumor protein homolog	0.87	60S ribosomal protein L17	0.10
ribosomal protein S5	0.86	NADH ubiquinone oxidoreductase chain 6	0.09

V. harveyi challenge at 6 hpi

Description	Fold change	Description	Fold change
gamma-aminobutyric acid (GABA-A) receptor	0.08	brain protein I3	0.01
cytochrome c oxidase subunit 2	0.06	sex-lethal protein homolog	0.01
KIAA0924 protein	0.03	clottable protein	0.01
Mo23 gene product	0.03	hypothetical protein F 26E4.9	0.01
chromatin-specific transcription elongation factor	0.02		

V. harveyi challenge at 24 hpi

Description	Fold change	Description	Fold change
gamma-actin	1.50	actin 3	0.58
cytoplasmic beta chain	1.23	histone 1	0.42
penaeidin-3k	1.10	hypothetical protein F 26E4.9	0.01
40S ribosomal protein S3a	0.88		

V. harveyi challenge at 48 hpi

Description	Fold change	Description	Fold change
60Sacidic ribosomal protein P2	15.09		
Penaeidin-2 precusor	14.66		
partial mitochondrial 16S rRNA gene	7.39		
RpL46 gene product	3.64		
60S ribosomal protein	3.21		
ribosomal protein S15	2.56		
gamma-actin	2.31		
penaeidin-3k	2.20		
60S ribosomal protein L19	2.17		
16S ribosomal RNA gene	1.91		
mitochondrial, complete genome	1.88		
40s ribosomal protein S11	1.67		
40S ribosomal protein S3a	1.65		
40S ribosomal protein S24	1.52		
hemocyte protein-glutamine gamma-glutamyltransferase	1.50		
5S ribosomal protein	1.43		
16S rRNA gene	1.36		
kupffer cell receptor	1.19		
40S ribosomal protein S20	1.14		
histone 1	1.08		
actin	0.87		
cytoplasmic beta chain	0.74		
actin 3	0.72		
H3 histone	0.70		
beta tub 56D gene product (alt 1)	0.58		
11.5 kDa antibacterial protein	0.56		
mitochondrial genome, partial 3' end	0.39		
ribosomal protein L26	0.30		
hypothetical protein	0.28		
ribosomal protein S8	0.27		
mitochondrial 1rRNA gene, partial 3' end	0.21		
SPARC-related protein	0.19		
asialoglycoprotein receptor	0.12		
60S ribosomal protein L18A	0.12		
Ef2b gene product	0.06		
NADH ubiquinone oxidoreductase chain 6	0.06		
60S ribosomal protein L17	0.05		
ATP synthase subunit C	0.05		
RpS 9 gene product	0.04		
profilin	0.04		
tubulin alpha-1 chain	0.04		
cytochrome c oxidase subunit VIIc	0.01		
Mo23 gene product	0.01		
clottable protein	0.01		

APPENDIX B

List of all genes on microarray slide

	ID	Name	position
No.1	IF1	Guanine nucleotide-binding protein gamma-1(*Drosophila melanogaster*)	1-1A
No.2	IF2	subunit Vib of cytochrome c oxidase(*Saccharomyces cerevisiae*)	1-2A
No.3	IF3	ribosomal protein L28(*Homo sapiens*)	1-3A
No.4	IF4	cytochrome b(*Penaeus monodon*)	1-4A
No.5	IF5	uk	1-5A
No.6	IF6	INNEXIN INX3(*Drosophila melanogaster*)	1-6A
No.7	IF7	uk	1-7A
No.8	IF8	uk	1-8A
No.9	IF9	uk	1-9A
No.10	IF10	uk	1-10A
No.11	IF11	ribosomal protein L31(*Heliothis virescens*)	1-11A
No.12	IF12	uk	1-12A
No.13	IF22	uk	1-1B
No.14	IF25	uk	1-2B
No.15	IF31	Proteasome 25 kDa subunit(*Drosophila melanogaster*)	1-3B
No.16	IF33	uk	1-4B
No.17	IF34	ADP-ribosylation factor 6(*Gallus gallus*)	1-5B
No.18	IF35	uk	1-6B
No.19	IF36	uk	1-7B
No.20	IF37	KIAA 1594 protein(*Homo sapiens*)	1-8B
No.21	IF39	arginine kinase(*Callinectes sapidus*)	1-9B
No.22	IF41	uk	1-10B
No.23	IF45	uk	1-11B
No.24	IF46	uk	1-12B
No.25	IF47	uk	1-1C
No.26	IF48	uk	1-2C
No.27	IF49	uk	1-3C
No.28	IF53	uk	1-4C
No.29	IF54	uk	1-5C
No.30	IF55	uk	1-6C
No.31	IF57	uk	1-7C
No.32	IF58	uk	1-8C
No.33	IF60	uk	1-9C
No.34	IF61	uk	1-10C
No.35	IF63	uk	1-11C
No.36	IF64	uk	1-12C
No.37	IF66	uk	1-1D
No.38	IF67	Penaeidin-2 precuson(*Penaeus vanamei*)	1-2D
No.39	IF68	uk	1-3D
No.40	IF70	Fc fragment of IgE, low affinity II(*Homo sapiens*)	1-4D
No.41	IF71	NADH dehydrogenase subunit 1(*Penaeus monodon*)	1-5D
No.42	IF73	uk	1-6D
No.43	IF74	PDGF / VEGF - like protein(*Drosophila melanogaster*)	1-7D
No.44	IF75	uk	1-8D
No.45	IF76	uk	1-9D

	ID	Name	position
No.46	IF77	uk	1-10D
No.47	IF79	60a ribosomal protein L27A(*Rattus rattus*)	1-11D
No.48	IF81	uk	1-12D
No.49	IF85	glutathione s-transferase(*Rattus norvegicus*)	1-1E
No.50	IF88	uk	1-2E
No.51	IF89	uk	1-3E
No.52	IF91	40s ribosomal protein s7(*Xenopus laevis*)	1-4E
No.53	IF92	uk	1-5E
No.54	IF94	uk	1-6E
No.55	IF95	uk	1-7E
No.56	IF96	uk	1-8E
No.57	IF97	uk	1-9E
No.58	IF99	glutamyl-tRNA(Glu) amidotransferase(*Deinococcus radiodurans*)	1-10E
No.59	IF100	Pelota protein(*Drosophila melanogaster*)	1-11E
No.60	IF101	uk	1-12E
No.61	IF102	uk	1-1F
No.62	IF103	ribosomal protein S28(*Cricetulus griseus*)	1-2F
No.63	IF104	uk	1-3F
No.64	IF105	uk	1-4F
No.65	IF106	uk	1-5F
No.66	IF107	unspecific monooxygenase(*Nicotiana tabacum*)	1-6F
No.67	IF108	uk	1-7F
No.68	IF111	ATP synthase oligomycin sensitivity conferral protein precurson(*Drosophila melanogaster*)	1-8F
No.69	IF114	translationally controlled tumor protein homolog(*Drosophila melanogaster*)	1-9F
No.70	IF116	60s ribosomal protein L13(*Gallus gallus*)	1-10F
No.71	IF117	ribosomal protin eL12(*Artemia sp.*)	1-11F
No.72	IF119	uk	1-12F
No.73	IF120	uk	1-1G
No.74	IF121	uk	1-2G
No.75	IF127	uk	1-3G
No.76	IF128	uk	1-4G
No.77	IF129	uk	1-5G
No.78	IF130	ribosomal protein S12(*Homo sapiens*)	1-6G
No.79	IF133	uk	1-7G
No.80	IF134	uk	1-8G
No.81	IF135	uk	1-9G
No.82	IF136	uk	1-10G
No.83	IF138	uk	1-11G
No.84	IF139	uk	1-12G
No.85	IF140	uk	1-1H
No.86	IF142	uk	1-2H
No.87	IF143	uk	1-3H
No.88	IF144	60s ribosomal protein L39(*Drosophila melanogaster*)	1-4H
No.89	IF146	uk	1-5H
No.90	IF147	uk	1-6H

	ID	Name	position
No.91	1F150	uk	1-7H
No.92	1F151	uk	1-8H
No.93	1F152	ribosomal protein L35A(*Homo sapiens*)	1-9H
No.94	1F153	cytosolic manganese superoxide dismutase percursor(*Callinectes sapidus*)	1-10H
No.95	1F155	uk	1-11H
No.96	1F159	uk	1-12H
No.97	1F160	Arginase(*Xenopus laevis*)	2-1A
No.98	1F161	ribosomal protein S15(*Homo sapiens*)	2-2A
No.99	1F162	uk	2-3A
No.100	1F163	uk	2-4A
No.101	1F164	uk	2-5A
No.102	1F166	uk	2-6A
No.103	1F168	uk	2-7A
No.104	1F169	uk	2-8A
No.105	1F170	uk	2-9A
No.106	1F173	uk	2-10A
No.107	1F174	uk	2-11A
No.108	1F175	uk	2-12A
No.109	1F176	uk	2-1B
No.110	1F177	uk	2-2B
No.111	1F178	uk	2-3B
No.112	1F180	40s ribosomal protein S10(Rat)	2-4B
No.113	1F182	uk	2-5B
No.114	1F184	uk	2-6B
No.115	1F185	uk	2-7B
No.116	1F186	uk	2-8B
No.117	1F189	uk	2-9B
No.118	1F190	uk	2-10B
No.119	1F193	transcription co-repressor Sin3(*Xenopus laevis*)	2-11B
No.120	1F194	uk	2-12B
No.121	1F196	gamma-actin(*Mus musculus*)	2-1C
No.122	1F197	uk	2-2C
No.123	1F198	uk	2-3C
No.124	1F199	uk	2-4C
No.125	1F200	40s ribosomal protein S11(*Xenopus laevis*)	2-5C
No.126	1F203	uk	2-6C
No.127	1F206	uk	2-7C
No.128	1F208	60s ribosomal protein L22(*Tripneustes gratilla*)	2-8C
No.129	1F209	uk	2-9C
No.130	1F211	uk	2-10C
No.131	1F212	uk	2-11C
No.132	1F213	ribosomal protein L3(*Mus musculus*)	2-12C
No.133	1F214	uk	2-1D
No.134	1F215	ribosomal protein S18(*Cherax destructor*)	2-2D
No.135	1F216	uk	2-3D
No.136	1F217	60s acidic ribosomal protein P2(Pig)	2-4D
No.137	1F218	hypothetical protein FJ12878(*Homo sapiens*)	2-5D
No.138	1F221	ribosomal protein L24(*Homo sapiens*)	2-6D
No.139	1F225	uk	2-7D
No.140	1F226	uk	2-8D
No.141	1F227	uk	2-9D

	ID	Name	position
No.142	1F229	uk	2-10D
No.143	1F230	uk	2-11D
No.144	1F231	uk	2-12D
No.145	1F237	uk	2-1E
No.146	1F239	uk	2-2E
No.147	1F240	ribosomal protein , large P2(*Homo sapiens*)	2-3E
No.148	1F242	40s ribosomal protein S24(*Fugu rubripes*)	2-4E
No.149	1F243	60s ribosomal protein P0(*Drosophila melanogaster*)	2-5E
No.150	1F244	hypothetical protein F26E4.9(*Caenorhabditis elegans*)	2-6E
No.151	1F245	uk	2-7E
No.152	1F246	40s ribosomal protein S25(*Drosophila melanogaster*)	2-8E
No.153	1F248	uk	2-9E
No.154	1F254	uk	2-10E
No.155	1F257	uk	2-11E
No.156	1F262	uk	2-12E
No.157	1F263	ribosomal protein L18a(*Homo sapiens*)	2-1F
No.158	1F264	uk	2-2F
No.159	1F266	uk	2-3F
No.160	1F268	uk	2-4F
No.161	1F269	uk	2-5F
No.162	1F270	ribosomal protein S5(*Homo sapiens*)	2-6F
No.163	1F271	uk	2-7F
No.164	1F273	uk	2-8F
No.165	1F276	uk	2-9F
No.166	1F277	uk	2-10F
No.167	1F279	uk	2-11F
No.168	1F280	uk	2-12F
No.169	1F282	uk	2-1G
No.170	1F283	uk	2-2G
No.171	1F284	uk	2-3G
No.172	1F285	uk	2-4G
No.173	1F287	uk	2-5G
No.174	1F288	uk	2-6G
No.175	1F290	uk	2-7G
No.176	1F291	amino acid starvation-induced protein(*Rattus norvegicus*)	2-8G
No.177	1F293	uk	2-9G
No.178	1F294	uk	2-10G
No.179	1F297	uk	2-11G
No.180	1F298	60S ribosomal protein L8(*Aedes albopictus*)	2-12G
No.181	1F299	uk	2-1H
No.182	1F302	uk	2-2H
No.183	1F304	uk	2-3H
No.184	1F306	hypothetical protein; CGI-117 protein(*Homo sapiens*)	2-4H
No.185	1F309	uk	2-5H
No.186	1F310	uk	2-6H
No.187	1F311	uk	2-7H
No.188	1F312	uk	2-8H
No.189	1F313	uk	2-9H
No.190	1F314	uk	2-10H
No.191	1F316	uk	2-11H

	ID	Name	position
No.192	IF317	uk	2-12H
No.193	IF318	uk	3-1A
No.194	IF319	uk	3-2A
No.195	IF321	uk	3-3A
No.196	IF322	uk	3-4A
No.197	IF323	uk	3-5A
No.198	IF324	uk	3-6A
No.199	IF325	uk	3-7A
No.200	IF326	uk	3-8A
No.201	IF327	uk	3-9A
No.202	IF330	uk	3-10A
No.203	IF334	uk	3-11A
No.204	IF335	uk	3-12A
No.205	IF337	uk	3-1B
No.206	IF342	SEC61 , gamma subunit(*Mus musculus*)	3-2B
No.207	IF344	uk	3-3B
No.208	IF346	uk	3-4B
No.209	IF347	uk	3-5B
No.210	IF348	uk	3-6B
No.211	IF349	uk	3-7B
No.212	IF352	uk	3-8B
No.213	IF353	uk	3-9B
No.214	IF354	uk	3-10B
No.215	IF357	uk	3-11B
No.216	IF359	uk	3-12B
No.217	IF361	uk	3-1C
No.218	IF362	putative senescence-associated protein(*Pisum sativum*)	3-2C
No.219	IF363	uk	3-3C
No.220	IF365	QM protein(*Bombyx mandarina*)	3-4C
No.221	IF366	uk	3-5C
No.222	IF367	uk	3-6C
No.223	IF369	uk	3-7C
No.224	IF370	uk	3-8C
No.225	IF371	uk	3-9C
No.226	IF372	uk	3-10C
No.227	IF373	NADH dehydrogenase subunit 4(*Penaeus monodon*)	3-11C
No.228	IF374	uk	3-12C
No.229	IF375	uk	3-1D
No.230	IF379	clottable protein(*Penaeus monodon*)	3-2D
No.231	IF380	uk	3-3D
No.232	IF390	uk	3-4D
No.233	IF411	uk	3-5D
No.234	IF412	Prophenoloxidase activating factor (*Holotrichia diomphalia*)	3-6D
No.235	IF413	uk	3-7D
No.236	IF415	uk	3-8D
No.237	IF416	uk	3-9D
No.238	IF417	uk	3-10D
No.239	IF418	ATP synthase coupling factor 6, mitochondrial precursor (*Drosophila elanogaster*)	3-11D
No.240	IF419	11.5 kDa antibacterial protein(*Carcinus maenas*)	3-12D

	ID	Name	position
No.241	IF421	uk	3-1E
No.242	IF422	uk	3-2E
No.243	IF423	uk	3-3E
No.244	IF424	uk	3-4E
No.245	IF425	uk	3-5E
No.246	IF426	uk	3-6E
No.247	IF427	uk	3-7E
No.248	IF428	uk	3-8E
No.249	IF429	uk	3-9E
No.250	IF430	uk	3-10E
No.251	IF431	uk	3-11E
No.252	IF434	uk	3-12E
No.253	IF435	uk	3-1F
No.254	IF436	uk	3-2F
No.255	IF438-1	gene MAC25 protein - human(*Homo sapiens*)	3-3F
No.256	IF438-2	gene MAC25 protein - human(*Homo sapiens*)	3-4F
No.257	IF440	uk	3-5F
No.258	IF441	Ef2b gene product(*Drosophila melanogaster*)	3-6F
No.259	IF444	gamma-aminobutyric acid (GABA-A) receptor (subunit epsilon)	3-7F
No.260	IF447	uk	3-8F
No.261	IF448	serine protease(*Procifastacus leniusculus*)	3-9F
No.262	IF449	uk	3-10F
No.263	IF450	40S ribosomal protein S20 (*Xenopus laevis*)	3-11F
No.264	IF451	heat shock cognate 70 kDa protein(*Oncorhynchus mykiss*)	3-12F
No.265	IF452	uk	3-1G
No.266	IF455	uk	3-2G
No.267	IF456	uk	3-3G
No.268	IF457	Bmsqd-2(*Bombyx mori*)	3-4G
No.269	IF458	RpL 19 gene product(*Drosophila melanogaster*)	3-5G
No.270	IF459	uk	3-6G
No.271	IF461	uk	3-7G
No.272	IF465	uk	3-8G
No.273	IF467	uk	3-9G
No.274	IF468	uk	3-10G
No.275	IF469	RIKEN(*Mus musculus*)	3-11G
No.276	IF471	ribosomal protein L29(*Spodoptera frugiperda*)	3-12G
No.277	IF473	uk	3-1H
No.278	IF476	uk	3-2H
No.279	IF477	2, 4-dienoyl -CoA reductase (NADH) (2, 4-dienoyl -CoA reductase (NADH))	3-3H
No.280	IF478	uk	3-4H
No.281	IF479	uk	3-5H
No.282	IF480	uk	3-6H
No.283	IF483	uk	3-7H
No.284	IF484	uk	3-8H
No.285	IF485	uk	3-9H
No.286	IF487	ubiquitin and ribosomal protein S27a(*Homo sapiens*)	3-10H

	ID	Name	position
No.287	IF488	uk	3-11H
No.288	IF489	uk	3-12H
No.289	N81	uk	4-1A
No.290	N80	uk	4-2A
No.291	N79	von Hippel-Lindau binding protein 1(*Homo sapiens*)	4-3A
No.292	N78	uk	4-4A
No.293	N77	KIAA1177 protein(*Homo sapiens*)	4-5A
No.294	N76	uk	4-6A
No.295	N75	uk	4-7A
No.296	N74	actin 1(*Dugesia polychroa*)	4-8A
No.297	N73	snRNP-associated protein(*Danio rerio*)	4-9A
No.298	N71	agrin precursor(*Homo sapiens*)	4-10A
No.299	N70	uk	4-11A
No.300	N69	uk	4-12A
No.301	N68	uk	4-1B
No.302	N67	uk	4-2B
No.303	N66	chromatin-specific transcription elongation factor(*Homo sapiens*)	4-3B
No.304	N63	uk	4-4B
No.305	N62	uk	4-5B
No.306	N61	uk	4-6B
No.307	N60	uk	4-7B
No.308	N59	uk	4-8B
No.309	N58	alpha-2-tubulin(*Gecarcinus lateralis*)	4-9B
No.310	N57	ubiquitin / ribosomal protein CEP52(*Drosophila melanogaster*)	4-10B
No.311	N56	actin 2(carrot)	4-11B
No.312	N52	uk	4-12B
No.313	N51	uk	4-1C
No.314	N50	guanine nucleotide-binding protein beta subunit(*Oreochromis niloticus*)	4-2C
No.315	N49	uk	4-3C
No.316	N48	uk	4-4C
No.317	N47	cytochrome c oxidase subunit VIa precursor(*Thunnus nilaticus*)	4-5C
No.318	N46	uk	4-6C
No.319	N45	uk	4-7C
No.320	N44	heat shock protein 90(chicken)	4-8C
No.321	N43	uk	4-9C
No.322	N42	5S ribosomal protein(*Mus musculus*)	4-10C
No.323	N41	Shak-8 (lethal) protein(*Drosophila melanogaster*)	4-11C
No.324	N40	uk	4-12C
No.325	N39	uk	4-1D
No.326	N38	ubiquitin-like protein / ribosomal protein S30(*Rattus rattus*)	4-2D
No.327	N37	tubulin beta-1 chain(*Homarus americanus*)	4-3D
No.328	N36	40S ribosomal protein S4(*Gallus gallus*)	4-4D
No.329	N35	uk	4-5D
No.330	N34	H3(*Xenopus laevis*)	4-6D
No.331	N33	uk	4-7D
No.332	N32	peroxisomal Ca-dependent solute carrier(*Oryctolagus cuniculus*)	4-8D

	ID	Name	position
No.333	N31	eukaryotic translation initiation factor XelF-4A III(*Xenopus laevis*)	4-9D
No.334	N30	uk	4-10D
No.335	N29	uk	4-11D
No.336	N28	uk	4-12D
No.337	N27	cytoplasmic beta chain(*Xenopus laevis*)	4-1E
No.338	N26	stromelysin-3 precursor(*Xenopus laevis*)	4-2E
No.339	N25	uk	4-3E
No.340	N24	uk	4-4E
No.341	N23	uk	4-5E
No.342	N22	26Sproteasome regulatory subunit(*Anopheles stephens*)	4-6E
No.343	N21	ribosomal protein S17(*Homo sapiens*)	4-7E
No.344	N20	uk	4-8E
No.345	N19	uk	4-9E
No.346	N18	uk	4-10E
No.347	N17	elongation factor-1 alpha(*Libinia emarginata*)	4-11E
No.348	N16	uk	4-12E
No.349	N15	hypothetical 36.9 kDa protein(*Caenorhabditis elegans*)	4-1F
No.350	N14	uk	4-2F
No.351	N13	cytochrome c oxidase subunit I(*Penaeus monodon*)	4-3F
No.352	N12	cytochrome c oxidase subunit III(*Penaeus monodon*)	4-4F
No.353	N11	uk	4-5F
No.354	N10	proteinase inhibitor-signal crayfish(*Pacifastacus leniusculus*)	4-6F
No.355	N8	uk	4-7F
No.356	N7	peptidyl-prolyl cis-trans isomerase 5(*Caenorhabditis elegans*)	4-8F
No.357	N5	cytochrome c oxidase subunit I(*Penaeus monodon*)	4-9F
No.358	N4	cytochrome c oxidase subunit II(*Penaeus monodon*)	4-10F
No.359	N3	uk	4-11F
No.360	N2	tubulin beta(*Homo sapiens*)	4-12F
No.361	N1	40S ribosomal protein S32(*Drosophila melanogaster*)	4-1G
No.362	IF520	penaeidin-3k(*LitoPenaeus vannamei*)	4-2G
No.363	IF518	uk	4-3G
No.364	IF516	uk	4-4G
No.365	IF515	uk	4-5G
No.366	IF513	uk	4-6G
No.367	IF512	eukaryotic translation initiation factor 2 beta subunit(*Drosophila melanogaster*)	4-7G
No.368	IF511	uk	4-8G
No.369	IF510	uk	4-9G
No.370	IF509	uk	4-10G
No.371	IF507	uk	4-11G
No.372	IF506	uk	4-12G
No.373	IF503	uk	4-1H
No.374	IF502	uk	4-2H

	ID	Name	position
No.375	1F501	Na/K-ATPase beta subunit isoform 3(*Drosophila melanogaster*)	4-3H
No.376	1F500	uk	4-4H
No.377	1F499	uk	4-5H
No.378	1F498	uk	4-6H
No.379	1F497	uk	4-7H
No.380	1F496-2	60Sacidic ribosomal protein P2(Pig)	4-8H
No.381	1F496-1	60Sacidic ribosomal protein P2(Pig)	4-9H
	ID	Name	position
No.382	1F495	uk	4-10H
No.383	1F491	uk	4-11H
No.384	1F490	uk	4-12H
No.385	N82	uk	5-1A
No.386	N83	uk	5-2A
No.387	N84	uk	5-3A
No.388	N85	prophenoloxidase(*Penaeus monodon*)	5-4A
No.389	N86	uk	5-5A
No.390	N87	uk	5-6A
No.391	N88	uk	5-7A
No.392	N89	uk	5-8A
No.393	N91	nucleoside diphosphate kinase(*Columba livia*)	5-9A
No.394	N92	uk	5-10A
No.395	N95	non-selenium glutathione phospholipid hydroperoxidase peroxidase(*Sus scrofa*)	5-11A
No.396	N96	uk	5-12A
No.397	N97	40S ribosomal protein S24(*Fugu rubripes*)	5-1B
No.398	N100	60S ribosomal protein -like(*Arabidopsis thaliana*)	5-2B
No.399	N101	Elongation factor-1 beta(*Bombyx mori*)	5-3B
No.400	N102	60S ribosomal protein L7A(Chicken)	5-4B
No.401	N103	aldehyde reductase(*Sus scrofa*)	5-5B
No.402	N105	uk	5-6B
No.403	N106	uk	5-7B
No.404	N107	ATP synthase subunit C(*Manduca sexta*)	5-8B
No.405	N108	60S ribosomal protein L10A(Rat)	5-9B
No.406	N109	uk	5-10B
No.407	N110	uk	5-11B
No.408	N111	multicatalytic endopeptidase complex(human)	5-12B
No.409	N113	uk	5-1C
No.410	N114	elongation factor 2(*Drosophila melanogaster*)	5-2C
No.411	N115	uk	5-3C
No.412	N116	vacuolar ATP synthase subunit G(*Manduca sexta*)	5-4C
No.413	N117	uk	5-5C
No.414	N118	uk	5-6C
No.415	N119	60S ribosomal protein L19(*Drosophila melanogaster*)	5-7C
No.416	N120	uk	5-8C
No.417	N123	uk	5-9C
No.418	N124	uk	5-10C
No.419	N125	uk	5-11C

	ID	Name	position
No.420	N127	uk	5-12C
No.421	N128	uk	5-1D
No.422	N131	PKCq-interacting protein PICOT(*Homo sapiens*)	5-2D
No.423	N132	uk	5-3D
No.424	N133	profilin(*Drosophila melanogaster*)	5-4D
No.425	N134-1	NADH dehydrogenase subunit II(*Penaeus monodon*)	5-5D
No.426	N134-2	NADH dehydrogenase subunit II(*Penaeus monodon*)	5-6D
No.427	N135	uk	5-7D
No.428	N136	ribosomal protein L37(Human)	5-8D
No.429	N138	60S ribosomal protein L17(Rat)	5-9D
No.430	N145	uk	5-10D
No.431	N148	uk	5-11D
No.432	N149-1	asialoglycoprotein receptor(*Mus musculus*)	5-12D
No.433	N149-2	asialoglycoprotein receptor(*Mus musculus*)	5-1E
No.434	N150	beta tub 56D gene product (alt 1)(*Drosophila melanogaster*)	5-2E
No.435	N151	uk	5-3E
No.436	N152	uk	5-4E
No.437	N153	60S ribosomal protein L14(*Rattus norvegicus*)	5-5E
No.438	N154	uk	5-6E
No.439	N155	uk	5-7E
No.440	N157	uk	5-8E
No.441	N159	uk	5-9E
No.442	N160	uk	5-10E
No.443	N161	uk	5-11E
No.444	N162	hypothetical protein F 26E4.9(*Caenorhabditis elegans*)	5-12E
No.445	N165	protein complex subunit 3A(*Homo sapiens*)	5-1F
No.446	N166	protein-glutamine(Epidermal)	5-2F
No.447	N167	uk	5-3F
No.448	N168	uk	5-4F
No.449	N169	proteasome subunit beta type 2(*Homo sapiens*)	5-5F
No.450	N170	uk	5-6F
No.451	N171	uk	5-7F
No.452	N173 *	uk	5-8F
No.453	N178	uk	5-9F
No.454	N179	uk	5-10F
No.455	N180	transcription initiation factor TFIID 110kD subunit(*Drosophila melanogaster*)	5-11F
No.456	N181	uk	5-12F
No.457	N182	uk	5-1G
No.458	N183	uk	5-2G
No.459	N184	uk	5-3G
No.460	N185	uk	5-4G
No.461	N186	hypothetical protein F08F1.8(*Caenorhabditis elegans*)	5-5G
No.462	N188	uk	5-6G
No.463	N189	uk	5-7G
No.464	N190	11-1 polypeptide(*Plasmodium faciparum*)	5-8G

	ID	Name	position
No.465	N193	COP9 (constitutive photomorphogenic) subunit 4(*Mus musculus*)	5-9G
No.466	N194	uk	5-10G
No.467	N195	uk	5-11G
No.468	N196	cellular nucleic acid binding protein(*Xenopus laevis*)	5-12G
No.469	N197	uk	5-1H
No.470	N198	uk	5-2H
No.471	N200	uk	5-3H
No.472	N201	uk	5-4H
No.473	N202	uk	5-5H
No.474	N204	uk	5-6H
No.475	N206	uk	5-7H
No.476	N207	uk	5-8H
No.477	N208	uk	5-9H
No.478	N210	uk	5-10H
No.479	N211	ribosomal protein L30(Rat)	5-11H
No.480	N212	uk	5-12H
No.481	N214	uk	6-1A
No.482	N215	33 kDa transcriptiun co-activator(*Homo sapiens*)	6-2A
No.483	N216	chain A, Triosephosphate isomerase(chicken)	6-3A
No.484	N218	uk	6-4A
No.485	N219	calpunin homolog(*Schistasoma japonicus*)	6-5A
No.486	N220	uk	6-6A
No.487	N221	ribosomal protein S16(Human)	6-7A
No.488	N222	uk	6-8A
No.489	N223	uk	6-9A
No.490	N224	uk	6-10A
No.491	N225	uk	6-11A
No.492	N226	uk	6-12A
No.493	N227	uk	6-1B
No.494	N228	chain H, cytochrome Bc1 complex(chicken)	6-2B
No.495	N230	RAS-related protein RAB-1A(*Lymnaea stagnalis*)	6-3B
No.496	N231	proteasome beta chain precursor(*Mus musculus*)	6-4B
No.497	N232	uk	6-5B
No.498	N233	uk	6-6B
No.499	N234	uk	6-7B
No.500	N235	uk	6-8B
No.501	N236	uk	6-9B
No.502	N237	low-density lipoprotein receptor relate protein - deleted in tumor(*Homo sapiens*)	6-10B
No.503	N238	uk	6-11B
No.504	N239	ubiquitin-like protein SMT3(*C. elegans*)	6-12B
No.505	N240	probable threonyl-tRNA synthetase(*Caenorhabditis elegans*)	6-1C
No.506	N241	uk	6-2C
No.507	N242	uk	6-3C
No.508	N243	hypothetical protein 18K protein(goldfish-mitochondrion)	6-4C
No.509	N244	beta2-chimeric(Rat)	6-5C
No.510	N248	uk	6-6C

	ID	Name	position
No.511	N249	glucose-6-phosphatase(*Mus musculus*)	6-7C
No.512	N250	uk	6-8C
No.513	N253	uk	6-9C
No.514	N254	uk	6-10C
No.515	N255	uk	6-11C
No.516	N257	uk	6-12C
No.517	N258	protein arginine methyltransferase(*Mus musculus*)	6-1D
No.518	N262	uk	6-2D
No.519	N263	uk	6-3D
No.520	N264	probable reverse transcriptase(house mosquito)	6-4D
No.521	N265	uk	6-5D
No.522	N266	dynein light chain, cytuplasmic(*Drosophila melanogaster*)	6-6D
No.523	N267	uk	6-7D
No.524	N268	hypothetical protein R17.2(*Caenorhabditis elegans*)	6-8D
No.525	N270	uk	6-9D
No.526	N271	putative large subunit ribosomal protein rpL 44(*Aedes triseriatus*)	6-10D
No.527	N272	Tubulin alpha-3 chain(*Homarus americanus*)	6-11D
No.528	N274	transkeum-associated protein(*Canis familiaris*)	6-12D
No.529	N275	uk	6-1E
No.530	N277	uk	6-2E
No.531	N278	uk	6-3E
No.532	N279	uk	6-4E
No.533	N281	kupffer cell receptor(*Rattus norvegicus*)	6-5E
No.534	N284	GTP-binding nuclear protein RHEB homolog(*Drosophila melanogaster*)	6-6E
No.535	N285	uk	6-7E
No.536	N286	uk	6-8E
No.537	N287	uk	6-9E
No.538	N288	uk	6-10E
No.539	N289	uk	6-11E
No.540	N290	RpS25 gene product(*Drosophila melanogaster*)	6-12E
No.541	N292	uk	6-1F
No.542	N293	uk	6-2F
No.543	N294	uk	6-3F
No.544	N295	uk	6-4F
No.545	N297	uk	6-5F
No.546	N298	uk	6-6F
No.547	N299	uk	6-7F
No.548	N301	Mo23 gene product(*Drosophila melanogaster*)	6-8F
No.549	N302	sex-lethal protein homolog(*Ceratitis capitata*)	6-9F
No.550	N303	uk	6-10F
No.551	N304	uk	6-11F
No.552	N305	RpS 9 gene product(*Drosophila melanogaster*)	6-12F
No.553	N306	uk	6-1G

	ID	Name	position
No.554	N307	LIV-1 protein, estrogen regulated(*Homo sapiens*)	6-2G
No.555	N308	uk	6-3G
No.556	N309	uk	6-4G
No.557	N310	uk	6-5G
No.558	N311	uk	6-6G
No.559	N314-1	uk	6-7G
No.560	N314-2	uk	6-8G
No.561	N315	uk	6-9G
No.562	N316	acyl coenzyme A dehydrogenase, long chain(*Rattus norvegicus*)	6-10G
No.563	N318-1	uk	6-11G
No.564	N318-2	uk	6-12G
No.565	N319	uk	6-1H
No.566	N320	selenoprotein w muscle 1(*Rattus norvegicus*)	6-2H
No.567	N321	uk	6-3H
No.568	N322	SPARC-related protein(*Mus musculus*)	6-4H
No.569	N323	uk	6-5H
No.570	N325	ribosomal protein S8(*Apis mellifera*)	6-6H
No.571	N327	NADH dehydrogenase subunit 5(*Penaeus monodon*)	6-7H
No.572	N328	uk	6-8H
No.573	N330	myosin regulatory light chain(*Drosophila melanogaster*)	6-9H
No.574	N331	uk	6-10H
No.575	N332	brain protein I3(*Homo sapiens*)	6-11H
No.576	N334	uk	6-12H
No.577	N335	uk	7-1A
No.578	N337	calmodulin(*Drosophila melanogaster*)	7-2A
No.579	N338	uk	7-3A
No.580	N339	uk	7-4A
No.581	N340	actin 3(*Limulus polyphemus*)	7-5A
No.582	N342	uk	7-6A
No.583	N344	uk	7-7A
No.584	N345	uk	7-8A
No.585	N346	actin, clone 403(Artemia sp)	7-9A
No.586	N347	uk	7-10A
No.587	N348-1	uk	7-11A
No.588	N348-2	uk	7-12A
No.589	N351	uk	7-1B
No.590	N352	ribosomal protein S29(human)	7-2B
No.591	N353	uk	7-3B
No.592	N354	uk	7-4B
No.593	N355-1	uk	7-5B
No.594	N355-2	uk	7-6B
No.595	N356	uk	7-7B
No.596	N357	uk	7-8B
No.597	N358	uk	7-9B
No.598	N359	5S ribosomal protein(*Mus musculus*)	7-10B
No.599	N361	40S ribosomal protein S15A(*Drosophila melanogaster*)	7-11B
No.600	N362-1	uk	7-12B
No.601	N362-2	histone 1(*Mytilus edulis*)	7-1C
No.602	N363	H3 histone(*Homo sapiens*)	7-2C

	ID	Name	position
No.603	N365	uk	7-3C
No.604	N366	uk	7-4C
No.605	N367	uk	7-5C
No.606	N373	uk	7-6C
No.607	N374	ribosomal protein S27a(Human)	7-7C
No.608	N375	uk	7-8C
No.609	N376	ATP synthase FO subunit 6(*Penaeus monodon*)	7-9C
No.610	N377	uk	7-10C
No.611	N378	uk	7-11C
No.612	N380	uk	7-12C
No.613	N381	uk	7-1D
No.614	N382	uk	7-2D
No.615	N383	KIAA0670 protein(*Homo sapiens*)	7-3D
No.616	N385	uk	7-4D
No.617	N386	tubulin alpha-1 chain(*Homarus americanus*)	7-5D
No.618	N387	uk	7-6D
No.619	N388	uk	7-7D
No.620	N389	uk	7-8D
No.621	N391	uk	7-9D
No.622	N393	eukaryotic translation initiation factor 3, subunit 2(*Mus musculus*)	7-10D
No.623	N394	uk	7-11D
No.624	N395	uk	7-12D
No.625	N398	uk	7-1E
No.626	N399	cytochrome c oxidase subunit VIIc(Mouse)	7-2E
No.627	N400	uk	7-3E
No.628	N401	uk	7-4E
No.629	N404	putative steroid dehydrogenase(Mouse)	7-5E
No.630	N405	uk	7-6E
No.631	N406	uk	7-7E
No.632	N407-1	ferritin 2 light chain homolog(*Drosophila melanogaster*)	7-8E
No.633	N407-2	ferritin 2 light chain homolog(*Drosophila melanogaster*)	7-9E
No.634	N408	uk	7-10E
No.635	N409	ATPsyn-gamma gene product(*Drosophila melanogaster*)	7-11E
No.636	N411	uk	7-12E
No.637	N413	uk	7-1F
No.638	N415	uk	7-2F
No.639	N416	KIAA0924 protein(*Homo sapiens*)	7-3F
No.640	N417	uk	7-4F
No.641	N418	uk	7-5F
No.642	N420	uk	7-6F
No.643	N421	uk	7-7F
No.644	N422	uk	7-8F
No.645	N423	uk	7-9F
No.646	N425	uk	7-10F
No.647	N426	uk	7-11F
No.648	N427	KIAA0152 gene product(*Homo sapiens*)	7-12F
No.649	N430	uk	7-1G
No.650	N431	double stranded RNA binding nuclear protein, ILF3(*Homo sapiens*)	7-2G
No.651	N433	uk	7-3G

	ID	Name	position
No.652	N434	ribosomal protein S26(Human)	7-4G
No.653	N435	uk	7-5G
No.654	N437	uk	7-6G
No.655	N438	uk	7-7G
No.656	N439	uk	7-8G
No.657	N440	proteasome subunit alpha type 6(*Mus musculus*)	7-9G
No.658	N442	uk	7-10G
No.659	N443	uk	7-11G
No.660	N445	uk	7-12G
No.661	N448	uk	7-1H
No.662	N449	uk	7-2H
No.663	N450	uk	7-3H
No.664	N451	uk	7-4H
No.665	N462	uk	7-5H
No.666	N463	uk	7-6H
No.667	N464	uk	7-7H
No.668	N466	uk	7-8H
No.669	N467	uk	7-9H
No.670	N468	uk	7-10H
No.671	N470	actin related protein(*Lumbricus rubellus*)	7-11H
No.672	N471	uk	7-12H
No.673	N474	uk	8-1A
No.674	N475	uk	8-2A
No.675	N476	uk	8-3A
No.676	N477	uk	8-4A
No.677	N483	uk	8-5A
No.678	N484	ribosomal protein L26(*Homo sapiens*)	8-6A
No.679	SH71	pol I polyprotein(*Vulvax carteri*)	8-7A
No.680	SH2001	uk	8-8A
No.681	SH2002	NADH-ubiquinone oxidoreductase 42 kDa subunit(*Drosophila melanogaster*)	8-9A
No.682	SH2004	uk	8-10A
No.683	SH2005	uk	8-11A
No.684	SH2006	uk	8-12A
No.685	SH2007	actin, cytoplasmic A3(*Bombyx mori*)	8-1B
No.686	SH2008	uk	8-2B
No.687	SH2009	uk	8-3B
No.688	SH2013	uk	8-4B
No.689	SH2017	uk	8-5B
No.690	SH2018	uk	8-6B
No.691	SH2021	uk	8-7B
No.692	SH2023	uk	8-8B
No.693	SH2025	uk	8-9B
No.694	SH2026	uk	8-10B
No.695	SH2030	ubiquitin - conjugating enzyme E2-24 kDa(*Drosophila melanogaster*)	8-11B
No.696	SH2036	60S ribosomal protein L6(*Homo sapiens*)	8-12B
No.697	SH2038	uk	8-1C
No.698	SH2040	uk	8-2C
No.699	SH2041	uk	8-3C
No.700	SH2043	nascent polypeptide-associated complex alpha chain(*Mus musculus*)	8-4C
No.701	SH2044	uk	8-5C
No.702	SH2046	uk	8-6C

	ID	Name	position
No.703	SH2048	uk	8-7C
No.704	SH2049	uk	8-8C
No.705	SH2051	chromatin-specific transcription elongation factor(*Homo sapiens*)	8-9C
No.706	SH2053	ATPase subunit 6(*Penaeus notialis*)	8-10C
No.707	SH2054	uk	8-11C
No.708	SH2055	uk	8-12C
No.709	SH2056	ATP synthase alpha chain, mitochondrial precursor(*Drosophila melanogaster*)	8-1D
No.710	SH2057	uk	8-2D
No.711	SH2058	uk	8-3D
No.712	SH2059	uk	8-4D
No.713	SH2060	uk	8-5D
No.714	SH2063	40S ribosomal protein S3a(*Oryzias latipes*)	8-6D
No.715	SH2064	uk	8-7D
No.716	SH2065	uk	8-8D
No.717	SH2066	beta - actin(*Penaeus vannamei*)	8-9D
No.718	SH2068	hypothetical protein(*Drosophila melanogaster*)	8-10D
No.719	PJH145r	uk	8-11D
No.720	PJH154f	uk	8-12D
No.721	PJH185f	heterogeneous ribonucleoprotein A, A2,B1 (*Schistocerca americana*)	8-1E
No.722	PJH186r	uk	8-2E
No.723	PJH222r	28S ribosomal RNA gene (*Penaeus vannamei*)	8-3E
No.724	PJH310f	radixin (*Mus musculus*)	8-4E
No.725	PJH318r	uk	8-5E
No.726	PJH327r	uk	8-6E
No.727	PJH328f	uk	8-7E
No.728	PJH331f	uk	8-8E
No.729	PJH332f	NADH dehydrogenase subunit 5 (*Penaeus monodon*)	8-9E
No.730	PJH333r	uk	8-10E
No.731	PJH334r	uk	8-11E
No.732	PJH336f	uk	8-12E
No.733	PJH338r	uk	8-1F
No.734	PJH341f	RpL46 gene product (*Drosophila melanogaster*)	8-2F
No.735	PJH351f	cytochrome c oxidase subunit 2 (*Penaeus notialis*)	8-3F
No.736	PJH353r	AIMS-P.mono40 Giant tiger prawn eyestalk cDNA library cDNA5' (*Penaeus monodon*)	8-4F
No.737	PJH354r	uk	8-5F
No.738	PJH356f	uk	8-6F
No.739	PJH359f	protein transporting protein sec61 gamma subunit (*Canis familiaris*)	8-7F
No.740	PJH361f	uk	8-8F
No.741	PJH362f	uk	8-9F
No.742	PJH363f	elongation factor 1-alpha (*Armadillidium vulgare*)	8-10F
No.743	PJH398f	uk	8-11F
No.744	PJH401f	uk	8-12F
No.745	PJH402f	PAC clone DJ1164K10 from 7p21-p22 (*Homo sapiens*)	8-1G

	ID	Name	position
No.746	PJH403f	gene for 24-kDa subunit of complex I,exon 7 (*H. sapiens*)	8-2G
No.747	PJH404r	CG10686 gene product (*Drosophila melanogaster*)	8-3G
No.748	PJH405r	uk	8-4G
No.749	PJH407f	uk	8-5G
No.750	PJH410f	alpha-tubulin (*Spirometra erinaceieuropaei*)	8-6G
No.751	PJH411r	ribosomal protein S25 (*H. sapiens*)	8-7G
No.752	PJH412r	uk	8-8G
No.753	PJH414f	uk	8-9G
No.754	PJH417f	hypothetical 32.0 KD protein (*C. elegans*)	8-10G
No.755	PJH424f	HMG1-like protein (*Drosophila melanogaster*)	8-11G
No.756	PJH429f	chloride intracellular channel protein 2 (*Homo sapiens*)	8-12G
No.757	PJH447f	uk	8-1H
No.758	PJH448f	translationally controlled tumor protein (*S.s cerevisiae*)	8-2H
No.759	PJH450r	uk	8-3H
No.760	PJH455r	uk	8-4H
No.761	PJH457r	uk	8-5H
No.762	PJH458f	uk	8-6H
No.763	PJH459f	uk	8-7H
No.764	PJH466r	hypothetical protein MGC2628 (*Homo sapiens*)	8-8H
No.765	PJH468f	28S ribosomal RNA gene (*Penaeus vannamei*)	8-9H
No.766	PJH473r	AIMS-P mono6 Giant tiger prawn eyestalk cDNA library cDNA5' (*Penaeus monodon*)	8-10H
No.767	PJH478f	60S ribosomal protein L18A(*Homo sapiens*)	8-11H
No.768	PJH479f	CG9091 gene product (*Drosophila melanogaster*)	8-12H
No.769	PJH480f	esterase FE4 precursor (Myzus persicae)	9-1A
No.770	PJH481f	18S ribosomal RNA gene (*Penaeus vannamei*)	9-2A
No.771	PJH483f	40S ribosomal protein S9 (*Homo sapiens*)	9-3A
No.772	PJH484r	uk	9-4A
No.773	PJH486f	16S ribosomal RNA gene (*Penaeus vannamei*)	9-5A
No.774	PJH487r	uk	9-6A
No.775	PJH488r	uk	9-7A
No.776	PJH494r	ribosomal protein L5 (*Rattus norvegicus*)	9-8A
No.777	PJH497r	uk	9-9A
No.778	PJH499r	uk	9-10A
No.779	PJH500r	uk	9-11A
No.780	PJH502r	uk	9-12A
No.781	PJH505r	40S ribosomal protein S16 (*Homo sapiens*)	9-1B
No.782	PJH527r	uk	9-2B
No.783	PJH535f	uk	9-3B
No.784	PJH541f	tubulin beta-1 chain (*Homarus americanus*)	9-4B
No.785	PJH608f	uk	9-5B
No.786	PJH612f	uk	9-6B
No.787	PJH630f	calmodulin (*Drosophila melanogaster*)	9-7B

	ID	Name	position
No.788	PJH641r	CG6848 gene product (*Drosophila melanogaster*)	9-8B
No.789	PJH645f	uk	9-9B
No.790	PJH649f	uk	9-10B
No.791	PJH672r	uk	9-11B
No.792	PJH679r	uk	9-12B
No.793	PJH702f	uk	9-1C
No.794	PJH729f	uk	9-2C
No.795	PJH742r	cytochrome c oxidase subunit (*Penaeus monodon*)	9-3C
No.796	PJH745f	myosin regulatory light chain (*Drosophila melanogaster*)	9-4C
No.797	PJH758r	uk	9-5C
No.798	PJH770r	uk	9-6C
No.799	PJH779r	uk	9-7C
No.800	PJH780r	elongation factor 2 (*Drosophila melanogaster*)	9-8C
No.801	PJH781r	uk	9-9C
No.802	PJH782f	16S ribosomal RNA gene (*Penaeus vannamei*)	9-10C
No.803	PJH788r	uk	9-11C
No.804	PJH798f	Chelonianin	9-12C
No.805	PJH800f	uk	9-1D
No.806	PJA12r	Balbiani ring protein 3 precursor (*Chironomus tentans*)	9-2D
No.807	PJA38r	uk	9-3D
No.808	PJA45r	uk	9-4D
No.809	PJA51r	uk	9-5D
No.810	PJA54r	uk	9-6D
No.811	PJA57r	uk	9-7D
No.812	PJA62r	uk	9-8D
No.813	PJA63r	uk	9-9D
No.814	PJA67r	profilin (*Drosophila melanogaster*)	9-10D
No.815	PJA69r	uk	9-11D
No.816	PJA70r	uk	9-12D
No.817	PJA71r	uk	9-1E
No.818	PJA72r	mitochondrial rRNA gene (*Penaeus notialis*)	9-2E
No.819	PJA75r	40S ribosomal protein S15A (*Drosophila melanogaster*)	9-3E
No.820	PJA80r	uk	9-4E
No.821	PJA84r	uk	9-5E
No.822	PJA92r	uk	9-6E
No.823	PJA103r	uk	9-7E
No.824	PJA106r	NADH dehydrogenase subunit 5 (*Penaeus notialis*)	9-8E
No.825	PJA108r	uk	9-9E
No.826	PJA109r	ubiquitin/ribosomal protein CEP52 (*Drosophila melanogaster*)	9-10E
No.827	PJA110r	uk	9-11E
No.828	PJA122r	uk	9-12E
No.829	PJA128r	uk	9-1F
No.830	PJA130r	uk	9-2F
No.831	PJA133r	60S ribosomal protein L27 (*Homo sapiens*)	9-3F
No.832	PJA136r	60S ribosomal protein L35 (*Rattus rattus*)	9-4F
No.833	PJA138f	16S rRNA gene (*Penaeus vannamei*)	9-5F

	ID	Name	position
No.834	PJA139r	uk	9-6F
No.835	PJA142r	uk	9-7F
No.836	PJA144r	uk	9-8F
No.837	PJA146r	uk	9-9F
No.838	PJA152r	uk	9-10F
No.839	PJA160r	uk	9-11F
No.840	PJA163r	uk	9-12F
No.841	PJA165r	uk	9-1G
No.842	PJA167r	uk	9-2G
No.843	PJA178r	uk	9-3G
No.844	PJA184r	uk	9-4G
No.845	PJA195r	uk	9-5G
No.846	PJA197r	uk	9-6G
No.847	PJA229r	40S ribosomal protein S (*Apis mellifera*)	9-7G
No.848	PJA242r	AEMTAN56 *Aedes aegypti* MT pSPORT library clone56 5' (*Aedes aegypti*)	9-8G
No.849	PJA244r	uk	9-9G
No.850	PJA253r	uk	9-10G
No.851	PJA255f	uk	9-11G
No.852	PJA260r	uk	9-12G
No.853	PJA274r	uk	9-1H
No.854	PJA277r	uk	9-2H
No.855	PJA278r	mitochondrial genome, partial 3' end (*P. notialis*)	9-3H
No.856	PJA281r	uk	9-4H
No.857	PJA282r	uk	9-5H
No.858	PJA284r	uk	9-6H
No.859	PJA287r	uk	9-7H
No.860	PJA288r	ATPase subunit 6 (*Penaeus notialis*)	9-8H
No.861	PJA289r	integrin beta subunit (*Pacifastacus leniusculus*)	9-9H
No.862	PJA295r	uk	9-10H
No.863	PJA320r	uk	9-11H
No.864	PJA321r	60S ribosomal protein L7A (*Fugu rubripes*)	9-12H
No.865	PJA325r	NADH dehydrogenase (*Drosophila melanogaster*)	10-1A
No.866	PJA326r	uk	10-2A
No.867	PJA332r	uk	10-3A
No.868	PJA333r	uk	10-4A
No.869	PJA346r	uk	10-5A
No.870	PJA351r	uk	10-6A
No.871	PJA358r	16S rRNA gene (*Penaeus vannamei*)	10-7A
No.872	PJA359r	uk	10-8A
No.873	PJA360r	uk	10-9A
No.874	PJA368f	uk	10-10A
No.875	PJA370f	uk	10-11A
No.876	PJA372r	40S ribosomal protein S9 (*Rattus norvegicus*)	10-12A
No.877	PJA381r	uk	10-1B
No.878	PJA387f	uk	10-2B
No.879	PJA388f	16S rRNA gene (*Penaeus vannamei*)	10-3B
No.880	PJA390r	uk	10-4B
No.881	PJA394r	NADH ubiquinone oxidoreductase chain 6 (*Drosophila melanogaster*)	10-5B
No.882	PJA396r	uk	10-6B

	ID	Name	position
No.883	PJA410r	uk	10-7B
No.884	PJA415r	mitochondrial trRNA gene, partial 3' end (*Penaeus vannamei*)	10-8B
No.885	PJA416r	uk	10-9B
No.886	PJA417r	60S ribosomal protein L7 (*Caenorhabditis elegans*)	10-10B
No.887	PJA418r	40S ribosomal protein S27 (*Homarus americanus*)	10-11B
No.888	PJA427r	uk	10-12B
No.889	PJA428r	uk	10-1C
No.890	PJA434r	16S rRNA gene (Metapenaeopsis lamellata)	10-2C
No.891	PJA442r	NADH dehydrogenase subunit 3 (*Penaeus notialis*)	10-3C
No.892	PJA444r	uk	10-4C
No.893	PJA455r	60S ribosomal protein L37A (*Ostertagia ostertagi*)	10-5C
No.894	PJA468r	16S rRNA gene (*Penaeus vannamei*)	10-6C
No.895	PJA476r	uk	10-7C
No.896	PJA484r	16S rRNA gene (*Penaeus vannamei*)	10-8C
No.897	PJA503r	uk	10-9C
No.898	PJA504r	clottable protein (*Penaeus monodon*)	10-10C
No.899	PJA524r	cytochrome c oxidase subunit 3 (*Penaeus notialis*)	10-11C
No.900	PJA530f	uk	10-12C
No.901	PJA534r	uk	10-1D
No.902	PJA538r	uk	10-2D
No.903	PJA540r	uk	10-3D
No.904	PJA541r	uk	10-4D
No.905	PJA544r	uk	10-5D
No.906	PJA545r	uk	10-6D
No.907	PJA553r	uk	10-7D
No.908	PJA560r	uk	10-8D
No.909	PJA561r	uk	10-9D
No.910	PJA575r	uk	10-10D
No.911	PJA578r	uk	10-11D
No.912	PJA580r	40S ribosomal protein S28 (*Homo sapiens*)	10-12D
No.913	PJA581r	uk	10-1E
No.914	PJA587r	uk	10-2E
No.915	PJA590r	uk	10-3E
No.916	PJA592r	uk	10-4E
No.917	PJA595r	innexin 2 (*Schistocerca americana*)	10-5E
No.918	PJA619r	uk	10-6E
No.919	PJA623r	40S ribosomal protein S12 (*Sus scrofa*)	10-7E
No.920	PJA634r	uk	10-8E
No.921	PJA637r	cytochrome c oxidase subunit 3 (*Penaeus notialis*)	10-9E
No.922	PJA660r	uk	10-10E
No.923	PJA661r	uk	10-11E
No.924	PJA667r	uk	10-12E
No.925	PJA671r	cell adhesion molecule-CAM	10-1F
No.926	PJA673r	uk	10-2F
No.927	PJA676r	uk	10-3F
No.928	PJA678r	uk	10-4F
No.929	PJA679r	uk	10-5F
No.930	PJA685f	uk	10-6F

	ID	Name	position
No.931	PJA696r	uk	10-7F
No.932	PJA713r	uk	10-8F
No.933	PJA714r	uk	10-9F
No.934	PJA721r	uk	10-10F
No.935	PJA727r	uk	10-11F
No.936	PJA738r	DNA-directed RNA polymerase 2 33Kda polypeptide(RPB3) (*H.sapiens*)	10-12F
No.937	PJA744r	uk	10-1G
No.938	PJA746f	mitochondrial, complete genome	10-2G
No.939	PJA762r	MTG8 protein(ETC protein) (*Homo sapiens*)	10-3G
No.940	PJA778r	40S ribosomal protein S15A (*Homo sapiens*)	10-4G
No.941	PJA811r	partial mitochondrial 16S rRNA gene (*Penaeus japonicus*)	10-5G
No.942	PJA815r	uk	10-6G
No.943	PJA823r	histone 1 (Mytilus edulis)	10-7G
No.944	PJA831r	uk	10-8G
No.945	PJV90r	neuronal apoptosis inhibitory protein (*Mus musculus*)	10-9G
No.946	PJV108f	uk	10-10G
No.947	PJV311r	uk	10-11G
No.948	PJV313r	uk	10-12G
No.949	PJV315r	Masquerade-like protein (*Pacifastacus leniusculus*)	10-1H
No.950	PJV341		10-2H
No.951	PJV342f	60S ribosomal protein L19 (*Mus musculus*)	10-3H
No.952	PJV355f	seleniide water dikinase (*Drosophila melanogaster*)	10-4H
No.953	PJV365r	14-3-3-like protein (*Drosophila melanogaster*)	10-5H
No.954	PJV404r	elongation factor 1-gamma (Artemia sp.)	10-6H
No.955	PJV405r	uk	10-7H
No.956	PJV408r	uk	10-8H
No.957	PJV409r	progammed cell death 6-interacting protein	10-9H
No.958	PJV411f	uk	10-10H
No.959	PJV412r	uk	10-11H
No.960	PJV413f	Kazal inhibitor type 2	10-12H
No.961	PJV414f	hemocyte protein-glutamine gamma-glutamyltransferase (*Tachypleus tridentatus*)	11-1A
No.962	PJV417	uk	11-2A
No.963	PJV418r	uk	11-3A
No.964	PJV419f	uk	11-4A
No.965	PJV421r	uk	11-5A
No.966	PJV422r	uk	11-6A
No.967	PJV426r	Ras-like GTP-binding protein-Drac3	11-7A
No.968	PJV432r	60S ribosomal protein L38 (*Homo sapiens*)	11-8A
No.969	PJV434r	uk	11-9A
No.970	PJV438r	S3 ribosomal protein (*Homo sapiens*)	11-10A
No.971	PJV440f	uk	11-11A
No.972	PJV444f	uk	11-12A
No.973	PJV445r	cytochrome c oxidase subunit 5ic (*Homo sapiens*)	11-1B
No.974	PJV452r	uk	11-2B
No.975	PJV458r	uk	11-3B
No.976	PJV463r	uk	11-4B

	ID	Name	position
No.977	PJV472f	proteasome 26s subunit (*Homo sapiens*)	11-5B
No.978	PJV473f	uk	11-6B
No.979	PJV476r	uk	11-7B
No.980	PJV479f	ESM-1 protein (*Mus musculus*)	11-8B
No.981	PJV484r	Rat insulinoma gene-Rig (*Homo sapiens*)	11-9B
No.982	PJV488r	60S ribosomal protein L34 (*Aedes albopictus*)	11-10B
No.983	PJV492f	predicted using Genefinder; preliminary prediction (*C. elegans*)	11-11B
No.984	PJV496r	uk	11-12B
No.985	PJV497r	ribosomal protein S15(*Homo sapiens*)	11-1C
No.986	PJV498r	nonmuscle myosin-2 heavy chain	11-2C
No.987	PJV501r	40S ribosomal protein (*Homo sapiens*)	11-3C
No.988	PJV514f	ribosomal protein L19 (*Drosophila melanogaster*)	11-4C
No.989	PJV603r	Collagen 4 alpha 4 (*Homo sapiens*)	11-5C
No.990	PJV611r	QM protein (*Bombyx mandarina*)	11-6C
No.991	PJV612f	uk	11-7C
No.992	PJV614r	60S ribosomal protein L35A (*Rattus rattus*)	11-8C
No.993	PJV615f	chloride intracellular channel protein (*Homo sapiens*)	11-9C
No.994	PJV618r	uk	11-10C
No.995	PJV625r	uk	11-11C
No.996	PJV637r	uk	11-12C
No.997	PJV691f	uk	12-1A
No.998	PJV703r	40S ribosomal protein S19 (Mya arenaria)	12-2A
No.999	PJV851f	calcium-sensitive chloride channel 2 (*Mus musculus*)	12-3A
No.1000	PJI14r	integral membrance protein 2A (*Homo sapiens*)	12-4A
No.1001	PJI22r	uk	12-5A
No.1002	PJI34r	internal transcribed spacer 2 (*Penaeus vannamei*)	12-6A
No.1003	PJI84r	uk	12-7A
No.1004	PJI102r	uk	12-8A
No.1005	PJI1681	tumor protein, translationally-controlled 1 (*Homo sapiens*)	12-9A
No.1006	PJI250r	uk	12-10A
No.1007	PJI255f	uk	12-11A
No.1008	PJI262r	uk	12-12A
No.1009	PJI308r	uk	12-1B
No.1010	PJI328r	uk	12-2B
No.1011	PJI330f	uk	12-3B
No.1012	PJI375r	uk	12-4B
No.1013	PJI378r	elastase inhibitor (*Anemonia sulcata*)	12-5B
No.1014	PJI440r	uk	12-6B
No.1015	PJI447r	keratin (*Danio rerio*)	12-7B
No.1016	PJI471r	uk	12-8B
No.1017	PJI481		12-9B
No.1018	PJIM1	Alpha-2-macroglobulin (Limulus sp.)	12-10B
No.1019	PJIM2	beta1,3 glucan binding protein	12-11B
No.1020	PJIM3	lysozyme c,p type precursor (*Mus musculus*)	12-12B
No.1021	PJIM4	peroxinectin	12-1C
No.1022	PJIM5	prophenoloxidase	12-2C

	ID	Name	position
No.1023	PJIM6	Masquerade-like protein (*Pacifastacus leniusculus*)	12-3C
No.1024	PJIM7	hemocyte protein-glutamine gamma-glutamyltransferase (*Tachypleus tridentatus*)	12-4C
No.1025	PJIM8	clotting protein	12-5C
No.1026	PJIM9	coagulation factor G-beta chain precursor (*Tachypleus tridentatus*)	12-6C
No.1027	NC1	pblue script vector	12-7C
No.1028	NC2	pblue script vector	12-8C
No.1029	NC3	pblue script vector	12-9C
No.1030	NC4	Tvector	12-10C
No.1031	PC1	b-actin	12-11C
No.1032	PC2	b-actin	12-12C

BIOGRAPHY

Miss Ratree Wongpanya was born on May 26, 1978 in Lampang. She graduated with the degree of Bachelor of Science (Hons) from the Department of Biology, Chaing Mai University in 2000. She has further studied for the Doctor of philosophy (Ph.D) degree in Biochemistry Department, Chulalongkorn University.