

Table S1

The complete list of differentially expressed genes affected by environmental stress identified in this meta-analysis showing; the gene or encoded protein name, the intracellular process to which the gene was assigned, the accession number for the gene and the type of stress that significantly affected the expression of the gene (designated by X in the corresponding box). Abbreviations: *Comms*, Communication; *QX*, QX disease/*Martelia sydneyi* infection, *B. ost*, *Bonamia ostrea*; *V. spl*, *Vibrio splendidus*; HV1, Ostreid Herpesvirus 1; *P. mar*, *Perkinsus marinus*; *temp high*, high temperature; *temp low*, low temperature; *HC*, hydrocarbons; *pest/herb*, pesticides/herbicides; *hypox*, hypoxia.

Gene/Protein	Intracellular Process	Accession #	QX	<i>B. ost</i>	<i>V. spl</i>	HV 1	<i>P. mar</i>	temp high	temp low	HC	pest/herb	hypox
14kDa subunit splicing factor 3b	Translation	GH612367	x	x								
16S ribosomal sequence, mitochondrial	Translation	JF744718		x								
18S ribosomal RNA	Translation	JF744719		x								
2,4-dienoyl CoA reductase 2	Metabolism	CB617391								x		
40S ribosomal protein s12	Translation	GH612387	x									
40S ribosomal protein s15a	Translation	CK172414			x							
40S ribosomal protein S16	Translation	EE677841							x			
40S ribosomal protein S2	Translation	EU108718							x			
40S ribosomal protein S23	Translation	EE677844						x				
40S ribosomal protein S24	Translation	EE677846							x			
40S ribosomal protein S26	Translation	EE677848							x			
40S ribosomal protein S3-B (S1B)	Translation	EE677850							x			
40S ribosomal protein S6	Translation	EE677852							x			

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
40S ribosomal protein S9	Translation	EE677856						X				
40S ribosomal protein SA	Translation	EE677858						X				
5' Methylthioadenosine phosphorylase	Metabolism	CD526712					X					
5' nucleotidase precursor	NAR	CB617398								X		
5-Aminolevulinate synthase	Metabolism	EU073062										
60S ribosomal protein L11	Translation	EE677862							X			
60S ribosomal protein L13A	Translation	EE677864						X	X		X	X
60S ribosomal protein L14	Translation	CX069164						X	X			
60S ribosomal protein L15	Translation	DW713892						X	X			
60S ribosomal protein L38	Translation	EE677867							X			
60S Ribosomal protein L44	Translation	GH612238	X									
60S ribosomal protein L6	Translation	EE677869					X	X	X		X	
60S ribosomal protein P0 (L10E)	Translation	EE677860							X			
60S ribosomal protein P2	Translation	DW713852						X	X			
67kD laminin receptor precursor	Comms	EE677695						X				
Acetylcholinesterase/	Comms	HS513818				X						
butyrylcholinesterase/Cholinesterase												
Acetyltransferase, GNAT family	Transcription	EE677696						X				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Actin 5C	Cytoskeleton	CX069247										X
Actin cytoplasmic A3	Cytoskeleton	CF369133					X		X		X	
Actin depolymerising factor	Cytoskeleton	GH612316	X						X			X
Actin, β	Cytoskeleton	GH612256	X	X		X	X	X	X	X		X
Acyl CoA oxidase similar protein	Metabolism	EU108716										
Acyl-CoA desaturase	Metabolism	HS513791				X		X		X		X
Adaptor related complex (AP-3)	Cytoskeleton	CD526736					X					
Adenosylhomocysteinase	NAR	CX069215										X
ADP-ribosylation factor 2	Cytoskeleton	CF369249									X	X
Adseverin-like protein	Cytoskeleton	JF744695		X		X						
Agglutination-aggregation factor 18K-LAF	Immunity	DW713832						X				
Agrin	Comms	CX069319										X
Alcohol dehydrogenase class III chain	Metabolism	CX069325										X
Aldehyde dehydrogenase family 6, subfamily A1	Metabolism	EE677697							X			
Alkaline phosphatase	Metabolism	CB617556								X		
Alpha macroglobulin	Protein regulation	HS513827				X						

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Alpha NAC	Translation	CD526829					X					
Alpha/beta hydrolase	Metabolism	HS513808				X	X					
Alpha-2 adrenergic receptor	Comms	GH612269	X									
alpha-2-macroglobulin, N-terminal and alpha-2-macroglobulin family member	Protein regulation	CX069254										X
Alpha-crystallin B chain	Unknown	EE677747	X					X				
Alternative oxidase isoform A	Metabolism	EU108720										
Amino acid transporter	Pumps	DW713848					X	X		X		X
Amyloid protein A	ECM	DW713847						X				
Ankyrin repeat domain 23	cytoskeleton	JF744726		X								
Anxa6 protein	Unknown	GH612414	X									
Apextrin	Cell cycle	CX069241										X
Apolipoprotein precursor	Metabolism	CB617501								X	X	
Archeron-like protein	Cell cycle	EU678313				X						
Arginine kinase	Metabolism	CD646729					X					X
arginine N-methyltransferase 5	Metabolism	EE677771							X			
Arginyl-tRNA synthetase	Translation	CB617392								X		
Asparaginyl tRNA-synthetase	Metabolism	EU108715					X					

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Aspartate amino transferase	Metabolism	AJ496218								X		
ATP syntase alpha subunit	Metabolism	CF369142						X			X	X
ATP syntase beta subunit	Metabolism	CF369132							X		X	
ATP synthase	Metabolism	EE677738						X				
ATP synthase F0 subunit 6	Metabolism	EE677700	X	X				X				
ATP synthase subunitB	Metabolism	GH612404	X							X		
Atpase H+transporting lysosomal protein	Pumps	CK172372			X							
ATP-binding cassette transporter sub-family a member 3	Pumps	EH645116					X					
ATP-gated ion channel subunit P2X4	Metabolism	CB617507								X		
ATP-synthase subunit D	Metabolism	HS513814				X						
Baculoviral IAP repeat-containing protein 2	Cell cycle	EE677701						X				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Band 4.1-like protein 3	Cell cycle	EE677719						X				
Basic transcription factor 3-like 4	Cell cycle	DW713855						X	X			
Bcl-2 protein	Cell cycle	EU678310				X						
Beta-1,3-glucan binding protein	Immunity	CF369126					X					
Betain-homocystein methyltransferase 2	Metabolism	CB617563								X		
Beta-transducin repeat-containing	Cell cycle	CD648487					X					
Beta-tubulin cofactor D	Cytoskeleton	EE677703							X			
Big defensin 3	Immunity	BG624524										
Bindin F lectin	Immunity	CF369228									X	
Block of proliferation protein/ribosome biogenesis	Cell cycle	HS513801				X						
BMP type 1b receptor	Comms	HS513821				X						
Bone morphogenic protein	Comms	CK172353			X							
BTD domain containing 9	Cell cycle	EH645251					X					
BTF3a	Transcription	CX069131										X
C1q-tumor necrosis factor	Comms	GH612394	X									
CAAX prenyl protease 1-like protein	Protein regulation	CB617436								X		

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Calcium/calmodulin-dependent protein kinase IV	Comms	CB617508								X		
Calmodulin	Comms	CX069134				X	X	X	X			X
Calmodulin binding protein/Striatin	Comms	CD650655					X					
Calponin-like protein	Cytoskeleton	EE677705						X				
Calreticulin	Stress	CX069289										X
CAP, adenylate cyclase-associated protein 1	Cytoskeleton	CX069294										X
Carbonic anhydrase	Metabolism	CX069170										X
Carbonic anhydrase precursor	Metabolism	CD649975					X					
Carboxypeptidase (serine) CPVL	Protein regulation	GH612419	X									
Carboxypeptidase B	Protein regulation	CX069279										X
Carnitine O-acetyltransferase	Metabolism	HS513823				X						
Cartilage specific proteoglycan (600 AA)/ Aggrecan core protein	ECM	EE677706							X			
Cathepsin B	Protein regulation	HS513799				X						
Cathepsin L	Protein regulation	BQ426622			X		X			X	X	X
Cathepsin Z	Protein regulation	DW713843						X				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Complement component C1q	Immunity	GH612251	x									
Complement receptor-1 like protein	Immunity	CX069321										x
Conserved hypothetical protein	Unknown	CV132138					x					
C-type lectin 1	Immunity	CV088356					x	x				x
C-type mannose receptor 2	Immunity	CV088207					x			x		
Cyclin B3	Cell cycle	CD646472					x					
Cyclin G1	Cell cycle	EH649368										
Cyclin L1	Cell cycle	HS513803					x					
Cyclophilin	Pumps	CK172388				x						
Cystatin B	Protein regulation	CX069133							x			x
Cysteine proteinase 3	Protein regulation	EE677707							x			
Cytochrome b	Metabolism	JF744720						x				x
Cytochrome b-c1 complex subunit 7	Metabolism	EE677877							x			
Cytochrome c oxidase assembly protein COX15	Metabolism	EH643958					x					
Cytochrome c oxidase assembly protein COX19	Metabolism	EE677721						x				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Cytochrome c oxidase subunit 1	Metabolism	JF744642	x	x	x	x	x	x	x			x
Cytochrome c oxidase subunit 2	Metabolism	GH612363	x									x
Cytochrome c oxidase subunit 3	Metabolism	JF744643	x						x	x		x
Cytochrome c oxidase subunit VIA, putative	Metabolism	JF744721		x								
Cytochrome c1 heme protein	Metabolism	JF744737		x			x					
Cytochrome P450 1A1	Stress	CB617404								x		
Cytochrome P450 3A29	Stress	GH612330	x									
Cytochrome P450 nifedipine oxidase (P450 3A4)	Stress	CB617459								x		
Cytoplasmic dynein intermediate chain	Cytoskeleton	DW713877							x			
Cytoplasmic intermediate filament protein A	Cytoskeleton	EE677724							x			
Cytoskeleton-associated protein 2/CTCL tumor antigen se20-10	Cytoskeleton	AF177227						x				
Dehydrogenase with MaoC-like domain	Metabolism	DW713819						x				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Deoxyribonuclease II beta	NAR	CD526732					x					
Divalent cation tolerant protein CUTA	Metabolism	JF744644		x								
DNA polymerase gamma	Cell cycle	EE677727						x				
DNA replication licensing factor MCM5	Cell cycle	CK172304			x							
DNA topoisomerase I	Cell cycle	CX069118			x			x	x			x
dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit STT3A-like [Aplysia californica]	Metabolism	EH649338					x					
Dopamine-beta-hydroxylase	Metabolism	CX069193										x
Dual adaptor for phosphotyrosine and 3 phosphoinositides	Comms	JF744646		x								
Dual oxidase maturation factor1	Stress	GH612333	x									
Dynein intermediate chain 1	Cytoskeleton	EH647818					x					
Dynein light chain	Cytoskeleton	JF744648		x								
Dyp-type peroxidase	Stress	JF744696		x								
Early meiotic induction protein 5, putative	Cell cycle	JF744722		x								
ECSIT	Comms	BQ427193			x							

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Esophageal cancer associated protein (UPF0505 protein C16orf62)	Other	CX069352										X
Euchromatic histone-lysine N-methyltransferase 2	Transcription	EH647103					X					
Eukaryotic Translation elongation factor 6	Translation	CX069250										X
Eukaryotic Translation initiation factor 3 subunit 6	Translation	CX069268										X
Eukaryotic Translation initiation factor 3 subunit H	Translation	EE677730							X			
Eukaryotic Translation initiation factor 4A isoform 1	Translation	CX069326										X
Eukaryotic Translation initiation factor 6	Translation	BG624116					X					
Extracellular superoxide dismutase (Cu, Zn)	Stress	GH612244	X	X	X				X	X	X	X
F box protein FBL5	Protein regulation	CX069124										X
Fas apoptotic inhibitory molecule	Cell cycle	EH644652					X					
fasciclin	ECM	CB617561								X		
Fascin	Cytoskeleton	EE677732						X				
Fatty acid binding protein	Metabolism	CK172312			X				X			X
Fatty acyl-CoA reductase 1	Metabolism	CX069303						X				X
Fatty acyl-CoA reductase 1	Metabolism	DW713858						X				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
F-box protein 8	Protein regulation	EH646447					x					
ferritin	Immunity	CB617552			x					x		
Fibrillin 3	ECM	CX069292							x			x
Fibrinogen c domain containing 1	Immunity	EH648988					x					
Fibrinogen/Fibroleukin	Immunity	GH612418	x									
Fibropellin	ECM	CB617395								x		
Fimbrin/plastin	Cytoskeleton	GH612282	x									
FK506-binding protein	Translation	EH645600					x					
Flavin adenine dinucleotide synthetase	Metabolism	HS513806				x						
Flavin-containing monooxygenase 2	Stress	GH612241	x							x		
Four jointed box 1	Cell cycle	EE677735							x			
Fructosamine-3-kinase relatedprotein	Metabolism	JF744698		x								
FYVE and coiled-coil domain containing 1	Cytoskeleton	DW713869							x			
G protein a subunit q	Comms	CD526752					x					
G protein-coupled receptor 48	Comms	CB617400								x		
Galectin 4	Immunity	BQ426390		x	x							
Galectin 9	Immunity	EE677739						x				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
galectin 6	Immunity	EH645010					x					
Gamma hydroxybutyrate dehydrogenase	Metabolism	CD646623					x					
Ganglioside GM2 activator precursor	Metabolism	CB617434								x		
GAPDH glyceraldehyde-3-phosphate dehydrogenase	Metabolism	JF744656		x								
Geminin	NAR	CB617390								x		
General mitochondrial matrix processing protease 55 kDa subunit	Metabolism	EE677741							x			
Ghitm-prov protein	Unknown	DW713838						x				
Glutamate receptor 4	Comms	EH644984					x					
Glutamine synthetase	Metabolism	CX069169						x		x	x	x
Glutathione S-transferase 3	Stress	CD526720					x					
Glutathione S-transferase omega class	Stress	CB617406		x						x		
Glutathione S-transferase P2	Stress	CB617512								x		x
Glycogen phosphorylase	Metabolism	CD526825					x					x
Glyoxylate reductase/hydroxypyruvate reductase	Metabolism	DW713837	x					x				
Glypican	Cell cycle	EU678311				x						
GTP binding protein alpha sub-unit	Comms	CD526737					x					

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
GTPase cRac1A	Comms	GH612359	x									
Guanine nucleotide binding protein G(s) subunit	Comms	CD526828					x					
Guanine nucleotide exchange factor VAV2	Comms	BQ427355			x							
Guanine nucleotide-binding protein beta subunit-like protein	Comms	CX069147										x
Guanine nucleotide-binding protein G(1) alpha subunit	Comms	GH612348	x									
Guanyl cyclase 32E	Comms	CF369176									x	
H ⁺ -transporting ATPase subunit d	Metabolism	CB617449								x		
HAUS augmin-like complex subunit 8	Cytoskeleton	EE677803						x				
Heart-type fatty acid-binding protein	Metabolism	EE677746							x			
Heat shock 70 kDa protein 12B	Stress	DW713816						x				
Heat shock factor binding protein 1	Stress	BG624136										
Heat shock protein 70	Stress	CX069205						x		x		x
Heat shock transcription factor	Stress	CD526741					x					
Hemagglutinin/amebocyte aggregation factor precursor	Immunity	EE677748						x				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Immunoglobulin domain cell adhesion molecule	ECM	EU678312				X						
Importin beta-2	Comms	HS513825				X						
Importin α 2	Comms	CB617497								X		
Inactive hydroxysteroid dehydrogenase-like protein 1	Metabolism	EU108712										X
Inhibitor of apoptosis IAP 1	Cell cycle	EH644983					X					
Inhibitor protein Kappa B (of nuclear factor)	Comms	BQ427181			X							
Inner membrane protein OXA1L	Metabolism	EE677759						X				
Integrin	Comms	BQ426737			X							
Integrin alpha 4	Comms	EH645734					X					
Interferon-induced protein 44	Immunity	FJ440108				X	X					
Intersectin-1	Cytoskeleton	CD526734					X					
Intersectin-1	Cytoskeleton	CD526818					X					
IQ motif containing G	Comms	DW713870							X			
Isocitrate dehydrogenase	Metabolism	CK172330			X							

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
IWS1-like protein	Transcription	GH612276	x									
Krueppel-like factor 5	Transcription	DW713853						x				
Lanthionin synthetase C-like protein	Unknown	CD526726					x					
L-ascorbate oxidase	Metabolism	CX069275										x
Latrophilin-3 [Crassostrea gigas]	Comms	CX069029										x
Legumain	Protein regulation	GH612370	x									
Lipopolysaccharide and beta-1,3-glucan binding protein	Immunity	CX069184								x		x
Lipoprotein receptor-related protein 5	Comms	CB617399								x	x	
Low density lipoprotein receptor	Comms	EE677762						x				
L-rhamnose-binding lectin CSL3	Immunity	EE677761	x							x		
Lys-63-specific deubiquitinase BRCC36	Protein regulation	CD526740					x					
Lysosomal associated transmembrane protein	Pumps	CD526837					x				x	
Lysosomal-trafficking regulator	Cytoskeleton	CD526748					x					
Lysozyme	Immunity	CB617495								x		
Macrophage expressed protein 1 like protein	Unknown	EF627979				x						
Malate dehydrogenase	Metabolism	CB617551								x		

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Mammalian ependymin related protein 1	Unknown	CB617379								X		
MAPK 8 interacting protein/C-Jun-amino-terminal kinase-interacting protein 1	Comms	CD526707					X					
Matrix metalloproteinase	Protein regulation	GH612373	X									
MEGF, Multiple epidermal growth factor-like domains 6	Comms	HS513812				X						
Meningioma expressed antigen 5/Bifunctional protein NCOAT	Transcription	CF369226								X	X	
Meprin A subunit beta	Unknown	CB617388								X		
Mesoderm specific transcript	Unknown	HS513793				X						
Metalloproteinase	Protein regulation	BQ426653			X							
Metallothionein	Stress	CX069233	X	X	X		X					X
Metallothionein iie	Stress	CV133159					X					
Metallothionein IV	Stress	CV087794					X					
Metastasis associated 1 family, member 3	Transcription	CD647013					X					
Metastasis associated protein MTA1	Transcription	DW713818						X				
Methionine adenosyltransferase I, alpha	Metabolism	EE677769						X				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Methionine aminopeptidase 1D	Stress	GH612309	x									
Methylmalonate semialdehyde dehydrogenase	Metabolism	EE677770							x			
Microsomal Glutathione S transferase	Stress	JF744700		x								
Mitochondrial acyl carrier protein 1 CG9160-PA, isoform A	Metabolism	EE677773							x			
Mitochondrial ATP synthase alpha-subunit	Metabolism	EE677774						x				
Mitochondrial ATP synthase F chain	Metabolism	JF744662		x				x				
Mitochondrial ATP-synthase γ -subunit - gamma	Metabolism	CB617389								x		
Mitochondrial import receptor subunit TOM70	Pumps	HS513779				x						
Mitochondrial processing peptidase β chain	Metabolism	CB617453								x		
Mitochondrial ribosomal protein L50	Translation	GH612250	x									
Mitochondrial-processing peptidase subunit beta	Protein regulation	EE677878							x			

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Mitotic apparatus protein p62	Cell cycle	GH612252	x									
Mitotic spindle assembly checkpoint protein MAD2B	Cell cycle	CV132655					x					
Monoamine oxidase	Metabolism	CB617454								x		
Mortality factor 4 like 1	Transcription	GH612336	x									
Multi EGF-like domains 6	Cell cycle	HS513784				x						
Multicopper oxidase	Stress	EU678320				x						
MyD88	Cell cycle	BQ426631			x							
Myosin subunit essential light chain	Cytoskeleton	CX069307						x				x
Myosin, heavy polypeptide 2	Cytoskeleton	JF744729		x								
Myosin-11	Cytoskeleton	HS513797				x						
N-acetyltransferase	Metabolism	CX069224	x									x
NADH dehydrogenase (ubiquinone) 1 β complex	Metabolism	JF744666		x								
NADH dehydrogenase (ubiquinone) Fe-S protein	Metabolism	EE677777							x			
NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial	Metabolism	CD526722					x					

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
NADH dehydrogenase 6	Metabolism	CK172316		x	x							x
NADH dehydrogenase flavoprotein 3	Metabolism	CV088395					x					
NADH dehydrogenase subunit 1	Metabolism	JF744668		x				x	x	x		x
NADH dehydrogenase subunit 2	Metabolism	JF744669		x				x	x			
NADH dehydrogenase subunit 3	Metabolism	JF744670		x						x		x
NADH dehydrogenase subunit 5	Metabolism	JF744671		x		x	x	x		x	x	x
NADH-ubiquinone oxidoreductase 20kDa subunit, mitochondrial precursor	Metabolism	CB617510								x		
NADH-ubiquinone oxidoreductase 49 kDa subunit	Metabolism	EE677778						x				
NADPH oxidase 5	Metabolism	HS513788				x						

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
NASCENT polypeptide-associated complex α polypeptide	Translation	CB617385						X		X		
Neuroendocrine convertase 1	Protein regulation	EE677804							X			
Nicastrin	Protein regulation	EU678321				X						
Non-selenium glutathione peroxidase	Stress	GH612366	X						X			X
Notch 3	Comms	EF999949				X						
Nuclear receptor subfamily 0 group B member 1	Comms	GH612365	X									
Nuclear RNA helicase	Transcription	CB617405								X		
Nucleoporin/Nuclear pore complex Nup98-Nup96	Translation	HS513786				X						
Nucleoredoxin	Stress	BG624216										
Nucleoside-diphosphate kinase 2	Metabolism	EE677783						X				
Nucleotidase 4F8	Comms	HS513826				X						
O-6-Methylguanine-DNA methyltransferase	NAR	JF744730		X								
Omega-amidase NIT2	Stress	CB617446								X		
Organic cation transporter protein	Pumps	EH647141					X					

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Ornithine decarboxylase	Metabolism	GH612342	x									
PAI-1 mRNA-binding protein/Plasminogen activator inhibitor 1 RNA-binding protein	Translation	EE677785						x				
Patched domain of vertebrates	Unknown	JF744701		x								
PDZ and LIM domain protein 5	Protein regulation	CD526717					x					
Pentraxin	Immunity	EE677736							x			
Peptidase (mitochondrial processing) alpha	Metabolism	EE677788							x			
Peptide methionine sulfoxide reductase	Stress	HS513802				x						
Peripheral-type benzodiazepine receptor/translocator protein	Pumps	EE677789						x				
Pernin precursor/dominin precursor	Stress	CD526735					x					
Peroxioredoxin 6	Stress	EH644464					x					
peroxisome biogenesis factor	Stress	CX069207										x
Pescadillo homolog	Cell cycle	CD526714					x					
PHD finger protein 10	Transcription	EU678315				x						
Phenylalanine hydroxylase	Metabolism	EE677790							x			

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Phosphoenolpyruvate carboxykinase	Metabolism	CB617458					x			x		
Phosphoinositide 4-kinase beta	Comms	EU678316				x						
Phospholipase C	Comms	EF627978				x						
Placental protein 11	Unknown	CD526820					x					
Plasminogen	Protein regulation	HS513831				x						
Poly (ADP-ribose) polymerases	Cell cycle	CB617394								x		
Poly(a)-specific ribonuclease	Translation	CK172399			x							
Polyamine N-acetyltransferase (spermidine)	Cell cycle	CX069230										x
polypirimidine tract binding 2 protein	Transcription	HS513817				x						
Polypyrimidine tract binding protein 2	Translation	JF744702		x								
PP2A inhibitor/protein SET	Unknown	CK172303			x							x
Predicted cation transporter	Pumps	DW713820						x				
Prefolding 5	Stress	JF744674		x								
PRELI domain-containing protein 1, mitochondrial	Unknown	DW713831						x				
Proactivator polypeptide	Protein regulation	CX069257										x
Probable histone-binding protein Caf1	Cell cycle	CB617555								x		

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
putative pyruvate dehydrogenase	Metabolism	GH612388	x									
Putative RecQ family DNA helicase protein	NAR	GH612302	x									
Putative SEC13 homolog	Translation	GH612304	x									
Putative senescence-associated protein	Cell cycle	CF369134									x	
Putative serine protease	Protein regulation	EH645736					x					
Putative signal peptide CUB-EGF-like domain-containing protein	Comms	GH612286	x									
Putative sphingosine-1-phosphate lyase	Metabolism	CX069242										x
QM protein	Stress	EE677795							x			
QM-like protein	Stress	EE677794							x			
Ra1A binding protein	Comms	CD526729					x					
Ra1BP1 protein	Comms	CD526836					x					
Rab acceptor 1	Comms	EH647696					x					
Rab GTPase-activating protein 1	Comms	EE677796						x				
Rab20-like protein	Comms	AF288677								x		
RAB21	Comms	CD526747					x					

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
RAB32	Comms	CB617401								X		
Rab5	Comms	EE677797						X				
Rab5 GDP/GTP exchange factor	Comms	CD526823					X					
Rab9 effector	Comms	CD526824					X					
RACK	Comms	DW713845						X				
Ran protein	Comms	CX069126										X
Ras-like GTP-binding protein Rho1	Comms	HS513782				X						
Ras-related protein Rab-1A	Comms	HS513805				X						
Ras-related protein Ral-A	Comms	HS513813				X						
RHO GTPase	Comms	CD526744					X					
Rho GTPase-activating protein	Comms	EH648693					X					
Rho-GDI related protein	Comms	HS513816				X						
Rho-related GTP-binding protein RhoE	Comms	EH648161					X					
Rhotekin	Comms	EH645903					X					

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Ribonuclease	NAR	GH612298	x									
Ribonucleoside-diphosphate reductase (M2 like)	NAR	GH612242	x									
Ribonucleotide reductase m1	NAR	CD649253					x					
Ribosomal protein 40S S2	Translation	CF369248									x	
Ribosomal protein 60S P2	Translation	CF369252									x	
Ribosomal protein L10	Translation	DW713840						x	x			
Ribosomal protein L10a	Translation	CX069331							x			
Ribosomal protein L12	Translation	CX069140		x					x			
Ribosomal protein L14	Translation	EE677832					x	x	x		x	
Ribosomal protein L17A	Translation	EE677835						x	x		x	
Ribosomal protein L18	Translation	AJ563457						x	x			
Ribosomal protein L18a	Translation	CF369129						x	x		x	
Ribosomal protein L21	Translation	EE677838						x	x			
Ribosomal protein L23a	Translation	EE677810							x			
Ribosomal protein L24	Translation	EE677813							x			
Ribosomal protein L26	Translation	EE677816						x				
Ribosomal protein L27	Translation	CF369246						x			x	
Ribosomal protein L3	Translation	CB617375						x				
Ribosomal protein L30	Translation	DW713879							x			
Ribosomal protein L34	Translation	EE677819			x	x			x			
Ribosomal protein L35	Translation	CD526721					x		x			

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Ribosomal protein L35a	Translation	DW713886							X			
Ribosomal protein L37	Translation	CD526724		X			X					
Ribosomal protein L38	Translation	CF369177									X	
Ribosomal protein L39	Translation	JF744704		X								
Ribosomal protein L5	Translation	CB617373							X			
Ribosomal protein L8 (rp11 gene)	Translation	JF744678		X					X			
Ribosomal protein L9	Translation	CB617372					X		X			
Ribosomal protein P2-like	Translation	DW713873							X			
Ribosomal protein rp16	Translation	GH612327	X									
Ribosomal protein RSP14A	Translation	DW713881							X			
Ribosomal protein S10	Translation	AJ561117							X			
Ribosomal protein S11	Translation	AJ563454						X	X		X	
Ribosomal protein S13	Translation	EE677829							X			
Ribosomal protein S14	Translation	EE677833					X	X	X			
Ribosomal protein S15	Translation	EE677836										
ribosomal protein S15a	Translation	CK172301			X							
Ribosomal protein S16	Translation	CB617376							X			
Ribosomal protein S18	Translation	CF369145									X	
Ribosomal protein S19	Translation	GH612321	X									
Ribosomal protein S20	Translation	CD526844					X					
Ribosomal protein S23	Translation	CD526842					X					

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Ribosomal protein S25	Translation	CF369224									X	
Ribosomal protein S26	Translation	JF744681		X								
Ribosomal protein S27-1	Translation	AJ563471						X				
Ribosomal protein S30	Translation	CD526709					X					
Ribosomal protein S3a	Translation	CB617371						X			X	
Ribosomal protein S3B	Translation	CF369251									X	
Ribosomal protein S4	Translation	DW713829						X	X			
Ribosomal protein S5	Translation	DW713844						X			X	
Ribosomal protein S6	Translation	DW713815						X			X	
Ribosomal protein S8	Translation	DW713821						X	X		X	
Ring finger 10 protein	Transcription	CD526710					X					
RNA Adenosin deaminase	NAR	CB617393								X		
RNA helicase	NAR	CF369125									X	
RNA polymerase B transcription factor 3/BTF3	Transcription	GH612385	X									
RNA polymerase III 53kDa subunit RPC4	Transcription	CX069158										X
RNA-binding protein	Translation	JF744682		X								
Scalloped-like transcription factor	Transcription	EH646343					X					
S-crystallin SL11	Unknown	EE677744						X				

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Sdhd-prov protein	Metabolism	CX069267										x
SEC14-like 1 (S cerevisiae)	other	CD648418					x					
Secretin receptor	Comms	EE677786							x			
Semaphorin 2A precursor	other	EU678318				x						
Serine/threonine-protein kinase 38	Comms	EU678314				x						
set1/Ash2 histone methyltransferase complex subunit ASH2-like	Metabolism	EH646453					x					
Severin	Cytoskeleton	EE677740							x			
Signal peptidase 25 kDA subunit	Translation	EE677806							x			
Similar to anaphase promoting complex subunit 10	Cell cycle	JF744725		x								
Similar to C1q-related factor precursor	Immunity	CB617506								x		
Similar to CDC-like kinase 2/Dual specificity protein kinase CLK2	Cell cycle	CB617496								x		
Small RHO1 GTPase	Comms	CD526835					x					
SMT3 or SUMO (small ubiquitin related modifier)	Stress	JF744705		x								
SnF7	Translation	EU678319				x						

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Sodium- and chloride-dependent GABA transporter 2	Pumps	CK172352			x							
Sodium glucose cotransporter	Pumps	CK172416			x							
Sodium-coupled monocarboxylate transporter 1	Pumps	CX069249										x
Sodium-dependent glucose transporter 1	Pumps	EH649185					x					
Sodium-dependent neutral amino acid transporter B(0)AT3 [Crassostrea gigas]	Pumps	CB617382								x		
Solute carrier 6	Pumps	JF744706		x								
Solute carrier family 23 member 2	Pumps	CX069171										x
Solute carrier family 25 member 38	Pumps	CB617452								x		
Solute carrier family 30 member 6	Pumps	EH646093					x					
Solute carrier family 37 member 2	Pumps	EH648237					x					
Solute carrier family 39 (zinc transporter)/zip14	Pumps	DW713824						x				
Solute carrier family 6 member 5	Pumps	CD649250					x					
Spectrin alpha chain	Cytoskeleton	EE677811							x			

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Spermatogenesis associated 6	Unknown	CD648429					x					
Spermidine synthase	Metabolism	CX069283										x
Spinster homolog 1	Cell cycle	EH648330					x					
Splicing factor 3B subunit 3	Transcription	HS513792				x						
Splicing factor U2AF	Transcription	CD526826					x		x	x		
Splicing factor, arginine/serine-rich 8 isoform 1	Transcription	HS513830				x						
SRY-box containing gene 4a	Cell cycle	EH644916					x					
Steroid 17-alpha-hydroxylase/17,20 lyase (CYP17a1) / Cyto P450 17a1	Stress	CX069165										x
Sterol regulatory element binding protein 1	Transcription	DW713854						x				
Steryl-sulfatase precursor	Metabolism	EE677814						x				
Stress-associated endoplasmic reticulum protein 2	Stress	EE677839						x				
Succinate dehydrogenase lp subunit	Metabolism	DW713882							x			
Sulfite oxidase	Metabolism	CB617450								x		
Sulfotransferase 1C1	Metabolism	CB617550								x		
Suppressor of profilin/p41 of actin-related complex 2/3	Cytoskeleton	EE677821							x			

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
SWI/SNF complex 170 kDa subunit	Transcription	CB617547								X		
Syntaxin-binding protein 5	Cytoskeleton	HS513794				X						
T-cell activation protein phosphatase 2C	Comms	CX069356										X
T-complex protein 1 subunit zeta	Translation	CB617445								X		
T-complex protein1, delta subunit	Stress	GH612315	X									
Tenascin-R/Restrictin	ECM	CB617514						X		X		X
Tetraspanin 27/CD82 antigen	Unknown	CD526719					X					
Tetraspanin-33	Unknown	CB617502								X		
TGF beta-inducible nuclear protein 1	Unknown	CX069355										X
Thioredoxin	Stress	JF744692		X								
Thioredoxin domain containing 14	Stress	JF744693		X								
Threonine 3-dehydrogenase	Metabolism	CX069187										X
Tissue inhibitor of metalloproteinase	Protein regulation	BQ427105		X	X							
TM2 domain-containing protein 3	Unknown	CB617559								X		
TNF-alpha factor	Comms	EE677849							X			
Toll-like receptor	Immunity	CD526746					X					

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Transcription factor iib	Transcription	BG624447					x					
Transcription factor Rel 2	Transcription	HS513832				x						
Transcription factor TF IIF subunit 2	Transcription	EE677857						x				
Transcription initiation factor IID	Transcription	GH612247	x									
Transforming growth factor-beta-induced protein ig-h3	ECM	CB617562								x		
Transglutaminase/annulin	Metabolism	EE677859			x				x			
Transketolase 2-like	Metabolism	HS513811				x	x					
Translation initiation factor 4A-III-like	Translation	HS513783				x						
Translation initiation factor eIF-2B delta subunit	Translation	EE677861							x			
Translation initiation factor SU11	Translation	EE677863							x			
Translationally controlled tumour protein	Unknown	GH612265	x									
Translocator protein	Pumps	CK240404					x					
Translocon-associated protein, gamma subunit	Translation	HS513810				x						x
Transmembrane protein 184C	Unknown	HS513798				x						
Transmembrane protein 77	Unknown	EH647902					x					
Transmembrane protein HEM-2	Unknown	CB617503								x		

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Transmembrane receptor (putative melatonin receptor)	Comms	HM034838				X						
Triacylglycerol lipase	Metabolism	EE677866						X		X		
Tripartite motif protein 2	Immunity	EE677868							X			
Tripartite motif protein 45	Immunity	CF369175									X	
Tripartite motif-containing protein 45	Transcription	CD526733					X					
tRNA splicing 2' phosphotransferase	Translation	CK172320			X							
Troponin c	Cytoskeleton	EH646757					X					
Trypsin	Protein regulation	CB617494								X		
Tubulin alpha	cytoskeleton	EE677872						X	X		X	X
Tubulin beta	cytoskeleton	CF369141	X					X	X	X	X	X
Tubulin, beta 2A variant	cytoskeleton	EE677873							X			
Tumour suppressor candidate 3	Cell cycle	GH612295	X									
Tyrosine-protein kinase receptor Tie-1	Comms	CD526723					X					
UbiE/COQ5 methyltransferase / 3-demethylubiquinone-9 3-methyltransferase	Metabolism	EE677875							X			
Ubiquitin	Protein regulation	CX069287							X			X

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Ubiquitin activating enzyme	Protein regulation	CB617402								X		
Ubiquitin conjugating enzyme	Protein regulation	CX069212					X					X
Ubiquitin conjugating enzyme E2 G2	Protein regulation	JF744694		X								
Ubiquitin fusion degradation 1-like	Protein regulation	EE677812							X			
Ubiquitin specific peptidase 16/Ubiquitin carboxyl-terminal hydrolase 16	Protein regulation	HS513829				X						
Ubiquitin/ribosomal L40 fusion protein	Protein regulation	CX069286										X
Ubiquitin/ribosomal protein S27a fusion protein	Protein regulation	EE677815							X			
Ubiquitin-conjugating enzyme E2W	Protein regulation	EH646812					X					
Universal Stress protein UspA/ Stress response protein nhaX	Stress	DW713874							X			
Vacuolar protein sorting 33B	Translation	EE677818						X				
Vacuolar sorting protein vps29	Translation	JF744707		X								
Vitellogenin	Metabolism	CX069172										X
Voltage dependent anion selective channel protein 2	Pumps	CX069174				X		X	X			X
Wurst-like protein	Cytoskeleton	HS513815				X						

Gene/Protein	Intracellular Process	Accession #	QX	B. ost	V. spl	HV 1	P. mar	temp high	temp low	HC	pest/ herb	hypox
Y-box factor homologue (APY1)	Transcription	CX069347										x
Yeast ino80-like protein	Transcription	CD647385					x					
Zinc finger CCCH domain-containing protein 3	Unknown	GH612291	x									
Zinc finger homeodomain 3	Unknown	EH644704					x					
Zinc finger protein Noc	Cell cycle	EE677808							x			
α 2-macroglobulin domain-containing protein 6/Pregnancy zone protein	Protein regulation	BQ426790			x					x		
β -1,3-Glucan binding protein	Immunity	CF369126								x	x	
β -N-acetylhexosaminidase/Beta-hexosaminidase	Metabolism	CB617435								x		