

[GO Accession: GO:0009605](#)

<b>Ontology</b>	Biological Process
<b>Description</b>	response to external stimulus
<b>Annotated/Total</b>	30/899
<b>Annotated/Total</b>	65/31819

ID	Description
AT3G63375	----
AT2G24210	TPS10 terpene synthase 10
AT5G24770	VSP2, ATVSP2 vegetative storage protein 2
AT2G02990	RNS1, ATRNS1 ribonuclease 1
AT4G16740	ATTPS03, TPS03 terpene synthase 03
AT3G11480	unknown protein; Has 23 Blast hits
AT1G52030	MBP2, MBP1, F-ATMBP myrosinase-binding protein 2
AT3G16470	JR1 Mannose-binding lectin superfamily protein
AT4G23600	COR13, JR2 Tyrosine transaminase family protein
AT1G32640	ATMYC2, RD22BP1, JAI1, JIN1, MYC2, ZBF1
AT1G43160	RAP2 related to AP2 6
AT2G06050	OPR3 oxophytodienoate-reductase 3
AT2G34810	FAD-binding Berberine family protein
AT4G15440	HPL1, CYP74B2 hydroperoxide lyase 1
AT3G45140	LOX2, ATLOX2 lipoxygenase 2
AT4G10390	Protein kinase superfamily protein
AT4G24350	Phosphorylase superfamily protein
AT5G07690	MYB29, ATMYB29, PMG2 myb domain protein
AT5G10300	ATMES5, MES5, HNL methyl esterase 5
AT1G74930	ORA47 Integrase-type DNA-binding superfamily protein
AT1G19640	JMT jasmonic acid carboxyl methyltransferase
AT5G44420	PDF1, PDF1A, LCR77 plant defensin 1
AT2G22330	CYP79B3 Cytochrome P450
AT3G61190	BAP1 BON association protein 1
AT2G25930	ELF3, PYK20 hydroxyproline-rich glycoprotein family protei
AT1G66760	MATE efflux family protein
AT1G01720	ATAF1, ANAC002 NAC (No Apical Meristem)
AT1G29395	COR414-TM1, COR413IM1, COR413-TM1 COLD REGULATED 314
AT1G51760	IAR3, JR3 peptidase M20/M25/M40 family protein
AT4G24220	VEP1, AWI31 NAD(P)-binding Rossmann-fold superfamily prote









[GO Accession: GO:0010035](#)

**Ontology:** Biological Process

**Description:** response to inorganic substance

**Annotated/Total number in query list:** 13/899

**Annotated/Total number in background/refer**

log2(fold_change)	ID	Description
45.6873	AT5G24770	VSP2, ATVSP2 vegetative storage protein 2
3.39559	AT3G23250	MYB15, ATY19, ATMYB15 myb domain pro
3.15638	AT1G54050	HSP20-like chaperones superfamily protei
2.96913	AT2G47180	AtGolS1, GolS1 galactinol synthase 1
2.79044	AT1G56650	PAP1, MYB75, SIAA1, ATMYB75
2.33413	AT5G59780	MYB59, ATMYB59, ATMYB59-1 myb domai
2.19977	AT1G07610	MT1C metallothionein 1C
2.04482	AT5G67300	ATMYBR1, ATMYB44, MYBR1, MYB44 myb
1.86974	AT2G47190	ATMYB2, MYB2 myb domain protein 2
1.83347	AT2G23290	AtMYB70, MYB70 myb domain protein 70
1.77261	AT2G41380	S-adenosyl-L-methionine-dependent meth
1.76284	AT3G20390	endoribonuclease L-PSP family protein
1.71555	AT3G46130	ATMYB48, ATMYB48-3, MYB48 myb domai
1.64373		
1.46705		
1.42175		
1.39665		
1.39232		
1.36514		
1.35594		
1.28822		
1.26261		
1.18528		
1.16651		
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[GO Accession: GO:0050896](#)

**Ontology: Biological Process**

**Description: response to stimulus**

**Annotated/Total number in query list: 159/899**

ance: 27/31819

**Annotated/Total number in background/reference**

log2(fold_change)	ID	Description
3.15638	AT3G63375	----
1.96538	AT4G34780	SAUR-like auxin-responsive protein fam
1.90882	AT4G37990	ELI3-2, ELI3, ATCAD8, CAD-B2 elicitor-a
1.69777	AT4G34800	SAUR-like auxin-responsive protein fam
1.65771	AT3G44300	NIT2, AtNIT2 nitrilase 2
1.54878	AT2G24210	TPS10 terpene synthase 10
1.41962	AT5G24770	VSP2, ATVSP2 vegetative storage prote
1.18991	AT1G28480	GRX480, roxy19 Thioredoxin superfami
1.15482	AT5G24780	VSP1, ATVSP1 vegetative storage prote
1.08316	AT2G02990	RNS1, ATRNS1 ribonuclease 1
1.08253	AT4G16740	ATTPS03, TPS03 terpene synthase 03
1.05889	AT3G59220	PRN, PRN1, ATPIRIN1 pirin
1.05358	AT4G23680	Polyketide cyclase/dehydrase and lipid
	AT1G52040	MBP1, ATMBP myrosinase-binding pro
	AT5G07010	ATST2A, ST2A sulfotransferase 2A
	AT3G11480	unknown protein; Has 23 Blast hits
	AT2G43510	ATTI1, TI1 trypsin inhibitor protein 1
	AT5G59310	LTP4 lipid transfer protein 4
	AT1G52890	ANAC019, NAC019 NAC domain contain
	AT1G52030	MBP2, MBP1, F-ATMBP myrosinase-bir
	AT3G03190	ATGSTF11, ATGSTF6, GSTF11 glutathior
	AT2G42540	COR15A, COR15 cold-regulated 15a
	AT3G20470	GRP-5, ATGRP-5, GRP5, ATGRP5 glycine
	AT3G16470	JR1 Mannose-binding lectin superfamil
	AT4G37150	ATMES9, MES9 methyl esterase 9
	AT1G19610	LCR78, PDF1 Arabidopsis defensin-like
	AT1G07400	HSP20-like chaperones superfamily pro
	AT5G15960	KIN1 stress-responsive protein (KIN1) /
	AT3G23250	MYB15, ATY19, ATMYB15 myb domain
	AT1G54050	HSP20-like chaperones superfamily pro
	AT4G23600	CORI3, JR2 Tyrosine transaminase fami
	AT2G44840	ATERF13, EREBP, ERF13 ethylene-respc
	AT2G30360	CIPK11, PKS5, SIP4, SNRK32 SOS3-inter
	AT1G05560	UGT1, UGT75B1 UDP-glucosyltransfera
	AT4G25000	ATAMY1, AMY1 alpha-amylase-like

AT1G32640	ATMYC2, RD22BP1, JAI1, JIN1, MYC2, Z
AT3G09260	PYK10, PSR3, BGLU23, LEB Glycosyl hyd
AT1G43160	RAP2 related to AP2 6
AT2G41070	EEL, ATBZIP12, DPBF4 Basic-leucine zip
AT2G06050	OPR3 oxophytodienoate-reductase 3
AT2G21660	ATGRP7, CCR2, GR-RBP7, GRP7 cold, cir
AT2G38750	ANNAT4 annexin 4
AT2G34810	FAD-binding Berberine family protein
AT2G22080	unknown protein; Has 96314 Blast hits
AT1G18710	AtMYB47, MYB47 myb domain protein
AT2G43535	Scorpion toxin-like knottin superfamily
AT2G47180	AtGolS1, GolS1 galactinol synthase 1
AT5G59220	HAI1 highly ABA-induced PP2C gene 1
AT5G17490	RGL3 RGA-like protein 3
AT1G56650	PAP1, MYB75, SIAA1, ATMYB75
ATCG00490	RBCL ribulose-bisphosphate carboxylas
AT4G15440	HPL1, CYP74B2 hydroperoxide lyase 1
AT3G26420	ATRZ-1A RNA-binding (RRM/RBD/RNP i
AT2G23620	ATMES1, MES1 methyl esterase 1
AT1G54040	ESP, TASTY, ESR epithiospecifier protei
AT3G16400	ATMLP-470, NSP1, ATNSP1 nitrile speci
AT5G07700	MYB76, AtMYB76 myb domain protein
AT5G59320	LTP3 lipid transfer protein 3
AT1G19670	ATCLH1, COR11, ATHCOR1, CLH1 chloro
AT2G45210	SAUR-like auxin-responsive protein far
AT5G16980	Zinc-binding dehydrogenase family pro
AT1G69260	AFP1 ABI five binding protein
AT5G59780	MYB59, ATMYB59, ATMYB59-1 myb do
AT5G15970	KIN2, COR6 stress-responsive protein (I
AT1G20030	Pathogenesis-related thaumatin superf
AT5G02200	FHL far-red-elongated hypocotyl1-like
AT4G15910	ATDI21, DI21 drought-induced 21
AT1G19570	DHAR1, ATDHAR1, DHAR5 dehydroasc
AT1G50460	HKL1, ATHKL1 hexokinase-like 1
AT3G45140	LOX2, ATLOX2 lipoxygenase 2
AT4G15210	ATBETA-AMY, AT-BETA-AMY, RAM1, BI
AT3G05640	Protein phosphatase 2C family protein
AT1G74430	MYB95, ATMYB95, ATMYBCP66 myb dc
AT2G42530	COR15B cold regulated 15b
AT2G33380	RD20, CLO-3 Caleosin-related family pr
AT4G12480	pEARLI 1 Bifunctional inhibitor/lipid-tra

AT4G10390	Protein kinase superfamily protein
AT1G07610	MT1C metallothionein 1C
AT4G24350	Phosphorylase superfamily protein
AT5G07690	MYB29, ATMYB29, PMG2 myb domain
AT2G32690	ATGRP23, GRP23 glycine-rich protein 2
AT2G05520	GRP-3, ATGRP-3, GRP3, ATGRP3 glycine
AT5G10300	ATMES5, MES5, HNL methyl esterase 5
AT2G29450	ATGSTU5, ATGSTU1, AT103-1A, GSTU5
AT1G74930	ORA47 Integrase-type DNA-binding sup
AT5G05690	CPD, CYP90A, CYP90, CBB3, DWF3, CYP
AT1G58848	Disease resistance protein (CC-NBS-LRF
AT1G19640	JMT jasmonic acid carboxyl methyltran
AT1G76180	ERD14 Dehydrin family protein
AT5G65050	AGL31, MAF2 AGAMOUS-like 31
AT1G17380	JAZ5, TIFY11A jasmonate-zim-domain p
AT5G44420	PDF1, PDF1A, LCR77 plant defensin 1
AT5G61600	ERF104 ethylene response factor 104
AT5G67480	BT4, ATBT4 BTB and TAZ domain
AT5G66400	RAB18, ATDI8 Dehydrin family protein
AT4G19230	CYP707A1 Cytochrome P450
AT2G27720	60S acidic ribosomal protein family
AT5G42380	CML39, CML37 calmodulin like 37
AT2G42260	UVI4, PYM uv-b-insensitive 4
AT1G66100	Plant thionin
AT5G67300	ATMYBR1, ATMYB44, MYBR1, MYB44 n
AT5G65420	CYCD4;1 CYCLIN D4;1
AT2G22330	CYP79B3 Cytochrome P450
AT2G43530	Scorpion toxin-like knottin superfamily
AT5G52310	COR78, LTI78, RD29A, LTI140 low-temp
AT3G61190	BAP1 BON association protein 1
AT1G70700	JAZ9, TIFY7 TIFY domain/Divergent CCT
AT2G47190	ATMYB2, MYB2 myb domain protein 2
AT2G25930	ELF3, PYK20 hydroxyproline-rich glycop
AT1G30480	DRT111 D111/G-patch domain-contain
AT2G23560	ATMES7, MES7 methyl esterase 7
AT5G42820	ATU2AF35B, U2AF35B Zinc finger C-x8-
AT4G21910	MATE efflux family protein
AT1G77000	ATSKP2;2, SKP2B RNI-like superfamily p
AT2G39800	P5CS1, ATP5CS delta1-pyrroline-5-carb
AT2G26020	PDF1b plant defensin 1b
AT1G66760	MATE efflux family protein

AT4G37000	ACD2, ATRCCR accelerated cell death 2
AT5G60430	drug transmembrane transporters;anti
AT1G58807	Disease resistance protein (CC-NBS-LRF
AT2G26740	ATSEH, SEH soluble epoxide hydrolase
AT3G15500	ATNAC3, ANAC055, NAC055, NAC3 NAC
AT5G05340	Peroxidase superfamily protein
AT5G54490	PBP1 pinoid-binding protein 1
AT1G01720	ATAF1, ANAC002 NAC (No Apical Meris
AT4G39030	EDS5, SID1 MATE efflux family protein
AT1G27650	ATU2AF35A U2 snRNP auxiliary factor s
AT1G29395	COR414-TM1, COR413IM1, COR413-TM
AT4G13770	CYP83A1, REF2 cytochrome p450
AT5G43170	AZF3, ZF3 zinc-finger protein 3
AT2G34600	JAZ7, TIFY5B jasmonate-zim-domain pr
AT2G23290	AtMYB70, MYB70 myb domain protein
AT2G41380	S-adenosyl-L-methionine-dependent m
AT1G54060	ASIL1 6B-interacting protein 1-like 1
AT3G16460	Mannose-binding lectin superfamily pr
AT2G37430	C2H2 and C2HC zinc fingers superfamil
AT1G51760	IAR3, JR3 peptidase M20/M25/M40 far
AT4G38680	GRP2, CSDP2, CSP2, ATCSP2 glycine rich
AT5G54810	TSB1, TRPB, TRP2, ATTSB1 tryptophan :
AT2G18050	HIS1-3 histone H1-3
AT3G20390	endoribonuclease L-PSP family protein
AT3G46130	ATMYB48, ATMYB48-3, MYB48 myb do
AT2G23430	ICK1, KRP1 Cyclin-dependent kinase inf
AT2G29420	ATGSTU7, GST25, GSTU7 glutathione S-
AT5G37055	ATSWC6, SEF HIT-type Zinc finger famil
AT3G09940	MDHAR, ATMDAR3, MDAR3, MDAR2 nr
AT2G46270	GBF3 G-box binding factor 3
AT3G46620	zinc finger (C3HC4-type RING finger) fa
AT5G61900	BON1, CPN1, BON Calcium-dependent
AT4G13850	ATGRP2, GR-RBP2, GRP2 glycine-rich RI
AT3G50970	LTI30, XERO2 dehydrin family protein
AT4G34000	ABF3, DPBF5 abscisic acid responsive e
AT2G43550	Scorpion toxin-like knottin superfamily
AT3G62550	Adenine nucleotide alpha hydrolases-li
AT4G24220	VEP1, AWI31 NAD(P)-binding Rossmann
AT5G58070	ATTIL, TIL temperature-induced lipocali
AT3G55460	SCL30, At-SCL30 SC35-like splicing factc
AT5G17520	RCP1, MEX1 root cap 1 (RCP1)

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AT4G13520

SMAP1 small acidic protein 1

[GO Accession: GO:0042221](#)

**Ontology:** Biological Process

**Description:** response to chemical stimulus

**Annotated/Total number in query list:** 96/899

**Count:** 985/31819

**Annotated/Total number in background/reference**

log2(fold_change)	ID	Description
45.6873	AT4G34780	SAUR-like auxin-responsive protein family
4.43433	AT4G34800	SAUR-like auxin-responsive protein family
3.85242	AT2G24210	TPS10 terpene synthase 10
3.63278	AT5G24770	VSP2, ATVSP2 vegetative storage protein 2
3.45531	AT1G28480	GRX480, roxy19 Thioredoxin superfamily protei
3.39559	AT5G24780	VSP1, ATVSP1 vegetative storage protein 1
3.15638	AT2G02990	RNS1, ATRNS1 ribonuclease 1
3.14265	AT3G59220	PRN, PRN1, ATPIRIN1 pirin
3.12987	AT5G07010	ATST2A, ST2A sulfotransferase 2A
2.96913	AT5G59310	LTP4 lipid transfer protein 4
2.79044	AT1G52890	ANAC019, NAC019 NAC domain containing prot
2.70247	AT3G03190	ATGSTF11, ATGSTF6, GSTF11 glutathione S-tran
2.59817	AT3G20470	GRP-5, ATGRP-5, GRP5, ATGRP5 glycine-rich prc
2.56372	AT3G16470	JR1 Mannose-binding lectin superfamily protein
2.55272	AT1G07400	HSP20-like chaperones superfamily protein
2.33413	AT5G15960	KIN1 stress-responsive protein (KIN1) / stress-in
2.27947	AT3G23250	MYB15, ATY19, ATMYB15 myb domain protein
2.21629	AT1G54050	HSP20-like chaperones superfamily protein
2.20315	AT4G23600	COR13, JR2 Tyrosine transaminase family protei
2.19977	AT2G44840	ATERF13, EREBP, ERF13 ethylene-responsive ele
2.14509	AT1G05560	UGT1, UGT75B1 UDP-glucosyltransferase 75B1
2.12301	AT4G25000	ATAMY1, AMY1 alpha-amylase-like
2.11075	AT1G32640	ATMYC2, RD22BP1, JAI1, JIN1, MYC2, ZBF1
2.04482	AT2G41070	EEL, ATBZIP12, DPBF4 Basic-leucine zipper (bZIP
2.04376	AT2G06050	OPR3 oxophytodienoate-reductase 3
2.03939	AT2G38750	ANNAT4 annexin 4
1.99185	AT2G34810	FAD-binding Berberine family protein
1.98703	AT2G22080	unknown protein; Has 96314 Blast hits
1.96538	AT1G18710	AtMYB47, MYB47 myb domain protein 47
1.90882	AT2G47180	AtGolS1, GolS1 galactinol synthase 1
1.86974	AT5G59220	HAI1 highly ABA-induced PP2C gene 1
1.86582	AT5G17490	RGL3 RGA-like protein 3
1.86233	AT1G56650	PAP1, MYB75, SIAA1, ATMYB75
1.85097	ATCG00490	RBCL ribulose-bisphosphate carboxylases
1.84087	AT1G54040	ESP, TASTY, ESR epithiospecifier protein



1.83347	AT5G07700	MYB76, AtMYB76 myb domain protein 76
1.7732	AT5G59320	LTP3 lipid transfer protein 3
1.77261	AT2G45210	SAUR-like auxin-responsive protein family
1.76315	AT5G16980	Zinc-binding dehydrogenase family protein
1.76284	AT1G69260	AFP1 ABI five binding protein
1.76051	AT5G59780	MYB59, ATMYB59, ATMYB59-1 myb domain prc
1.75456	AT5G15970	KIN2, COR6 stress-responsive protein (KIN2) /
1.71555	AT4G15910	ATDI21, DI21 drought-induced 21
1.70653	AT1G19570	DHAR1, ATDHAR1, DHAR5 dehydroascorbate re
1.70289	AT3G45140	LOX2, ATLOX2 lipoxygenase 2
1.69972	AT3G05640	Protein phosphatase 2C family protein
1.69777	AT1G74430	MYB95, ATMYB95, ATMYBCP66 myb domain pr
1.68068	AT2G33380	RD20, CLO-3 Caleosin-related family protein
1.66102	AT1G07610	MT1C metallothionein 1C
1.65771	AT5G07690	MYB29, ATMYB29, PMG2 myb domain protein
1.65291	AT2G32690	ATGRP23, GRP23 glycine-rich protein 23
1.64373	AT2G05520	GRP-3, ATGRP-3, GRP3, ATGRP3 glycine-rich prc
1.62974	AT2G29450	ATGSTU5, ATGSTU1, AT103-1A, GSTU5 glutathic
1.61372	AT1G19640	JMT jasmonic acid carboxyl methyltransferase
1.61193	AT1G76180	ERD14 Dehydrin family protein
1.58486	AT1G17380	JAZ5, TIFY11A jasmonate-zim-domain protein 5
1.57678	AT5G44420	PDF1, PDF1A, LCR77 plant defensin 1
1.56413	AT5G67480	BT4, ATBT4 BTB and TAZ domain
1.5608	AT5G66400	RAB18, ATDI8 Dehydrin family protein
1.55906	AT5G42380	CML39, CML37 calmodulin like 37
1.55457	AT5G67300	ATMYBR1, ATMYB44, MYBR1, MYB44 myb dom
1.55131	AT5G65420	CYCD4;1 CYCLIN D4;1
1.54878	AT5G52310	COR78, LTI78, RD29A, LTI140 low-temperature-
1.54072	AT3G61190	BAP1 BON association protein 1
1.53978	AT1G70700	JAZ9, TIFY7 TIFY domain/Divergent CCT motif
1.52682	AT2G47190	ATMYB2, MYB2 myb domain protein 2
1.51773	AT2G25930	ELF3, PYK20 hydroxyproline-rich glycoprotein fa
1.5068	AT4G21910	MATE efflux family protein
1.47731	AT2G39800	P5CS1, ATP5CS delta1-pyrroline-5-carboxylate s
1.46705	AT5G60430	drug transmembrane transporters;antiporters
1.45266	AT2G26740	ATSEH, SEH soluble epoxide hydrolase
1.43642	AT3G15500	ATNAC3, ANAC055, NAC055, NAC3 NAC domain
1.43569	AT5G05340	Peroxidase superfamily protein
1.43547	AT5G54490	PBP1 pinoid-binding protein 1
1.43225	AT1G01720	ATAF1, ANAC002 NAC (No Apical Meristem)
1.42336	AT1G29395	COR414-TM1, COR413IM1, COR413-TM1 COLD

1.42175	AT5G43170	AZF3, ZF3 zinc-finger protein 3
1.41962	AT2G34600	JAZ7, TIFY5B jasmonate-zim-domain protein 7
1.39665	AT2G23290	AtMYB70, MYB70 myb domain protein 70
1.39232	AT2G41380	S-adenosyl-L-methionine-dependent methyltra
1.38519	AT1G54060	ASIL1 6B-interacting protein 1-like 1
1.38181	AT2G37430	C2H2 and C2HC zinc fingers superfamily
1.36514	AT5G54810	TSB1, TRPB, TRP2, ATTSB1 tryptophan synthase
1.35806	AT2G18050	HIS1-3 histone H1-3
1.35594	AT3G20390	endoribonuclease L-PSP family protein
1.34001	AT3G46130	ATMYB48, ATMYB48-3, MYB48 myb domain pro
1.29601	AT2G23430	ICK1, KRP1 Cyclin-dependent kinase inhibitor fa
1.28822	AT2G29420	ATGSTU7, GST25, GSTU7 glutathione S-transfer
1.28492	AT3G09940	MDHAR, ATMDAR3, MDAR3, MDAR2 monodehy
1.28147	AT2G46270	GBF3 G-box binding factor 3
1.27397	AT3G46620	zinc finger (C3HC4-type RING finger) family
1.26261	AT5G61900	BON1, CPN1, BON Calcium-dependent phospho
1.26214	AT3G50970	LTI30, XERO2 dehydrin family protein
1.24913	AT4G34000	ABF3, DPBF5 abscisic acid responsive elements-
1.24725	AT3G55460	SCL30, At-SCL30 SC35-like splicing factor 30
1.23777	AT4G13520	SMAP1 small acidic protein 1
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1.00884

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[GO Accession: GO:0009719](#)

**Ontology:** Biological Process

**Description:** response to endogenous stimulus

**Annotated/Total number in query list:** 67/899

Count: 439/31819

**Annotated/Total number in background/reference**

log2(fold_change)	ID	Description
4.43433	AT4G34780	SAUR-like auxin-responsive protein family
3.63278	AT4G34800	SAUR-like auxin-responsive protein family
3.39559	AT2G24210	TPS10 terpene synthase 10
3.15638	AT5G24770	VSP2, ATVSP2 vegetative storage protein 2
3.14265	AT1G28480	GRX480, roxy19 Thioredoxin superfamily protein
3.12987	AT5G24780	VSP1, ATVSP1 vegetative storage protein 1
2.96913	AT2G02990	RNS1, ATRNS1 ribonuclease 1
2.70247	AT3G59220	PRN, PRN1, ATPIRIN1 pirin
2.55272	AT5G07010	ATST2A, ST2A sulfotransferase 2A
2.21629	AT5G59310	LTP4 lipid transfer protein 4
2.20315	AT3G20470	GRP-5, ATGRP-5, GRP5, ATGRP5 glycine-rich
2.14509	AT3G16470	JR1 Mannose-binding lectin superfamily protein
2.11075	AT5G15960	KIN1 stress-responsive protein (KIN1) / stress
2.04482	AT3G23250	MYB15, ATY19, ATMYB15 myb domain protein
1.99185	AT4G23600	COR13, JR2 Tyrosine transaminase family protein
1.98703	AT2G44840	ATERF13, EREBP, ERF13 ethylene-responsive
1.96538	AT4G25000	ATAMY1, AMY1 alpha-amylase-like
1.90882	AT1G32640	ATMYC2, RD22BP1, JAI1, JIN1, MYC2, ZBF1
1.86974	AT2G41070	EEL, ATBZIP12, DPBF4 Basic-leucine zipper (bZIP)
1.86582	AT2G38750	ANNAT4 annexin 4
1.85097	AT2G34810	FAD-binding Berberine family protein
1.84087	AT1G18710	AtMYB47, MYB47 myb domain protein 47
1.83347	AT5G59220	HAI1 highly ABA-induced PP2C gene 1
1.76315	AT5G17490	RGL3 RGA-like protein 3
1.76284	AT1G56650	PAP1, MYB75, SIAA1, ATMYB75
1.75456	ATCG00490	RBCL ribulose-bisphosphate carboxylases
1.71555	AT1G54040	ESP, TASTY, ESR epithiospecifier protein
1.70653	AT5G07700	MYB76, AtMYB76 myb domain protein 76
1.70289	AT5G59320	LTP3 lipid transfer protein 3
1.69777	AT2G45210	SAUR-like auxin-responsive protein family
1.68068	AT1G69260	AFP1 ABI five binding protein
1.66102	AT5G59780	MYB59, ATMYB59, ATMYB59-1 myb domain
1.65771	AT5G15970	KIN2, COR6 stress-responsive protein (KIN2)
1.65291	AT4G15910	ATDI21, DI21 drought-induced 21
1.61193	AT1G19570	DHAR1, ATDHAR1, DHAR5 dehydroascorbate

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1.09387

1.08713

AT3G45140	LOX2, ATLOX2 lipoxygenase 2
AT1G74430	MYB95, ATMYB95, ATMYBCP66 myb domain
AT2G33380	RD20, CLO-3 Caleosin-related family protein
AT5G07690	MYB29, ATMYB29, PMG2 myb domain prote
AT2G32690	ATGRP23, GRP23 glycine-rich protein 23
AT2G05520	GRP-3, ATGRP-3, GRP3, ATGRP3 glycine-rich
AT1G19640	JMT jasmonic acid carboxyl methyltransferase
AT1G76180	ERD14 Dehydrin family protein
AT1G17380	JAZ5, TIFY11A jasmonate-zim-domain protei
AT5G44420	PDF1, PDF1A, LCR77 plant defensin 1
AT5G67480	BT4, ATBT4 BTB and TAZ domain
AT5G66400	RAB18, ATDI8 Dehydrin family protein
AT5G67300	ATMYBR1, ATMYB44, MYBR1, MYB44 myb d
AT5G52310	COR78, LTI78, RD29A, LTI140 low-temperatu
AT1G70700	JAZ9, TIFY7 TIFY domain/Divergent CCT moti
AT2G47190	ATMYB2, MYB2 myb domain protein 2
AT2G25930	ELF3, PYK20 hydroxyproline-rich glycoprotei
AT2G39800	P5CS1, ATP5CS delta1-pyrroline-5-carboxyla
AT2G26740	ATSEH, SEH soluble epoxide hydrolase
AT3G15500	ATNAC3, ANAC055, NAC055, NAC3 NAC dom
AT5G54490	PBP1 pinoid-binding protein 1
AT1G01720	ATAF1, ANAC002 NAC (No Apical Meristem)
AT1G29395	COR414-TM1, COR413IM1, COR413-TM1 CC
AT2G34600	JAZ7, TIFY5B jasmonate-zim-domain protein
AT1G54060	ASIL1 6B-interacting protein 1-like 1
AT3G46130	ATMYB48, ATMYB48-3, MYB48 myb domain
AT2G23430	ICK1, KRP1 Cyclin-dependent kinase inhibito
AT3G09940	MDHAR, ATMDAR3, MDAR3, MDAR2 monoc
AT2G46270	GBF3 G-box binding factor 3
AT3G50970	LTI30, XERO2 dehydrin family protein
AT4G34000	ABF3, DPBF5 abscisic acid responsive eleme
AT4G13520	SMAP1 small acidic protein 1

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1.08253  
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1.00884







[GO Accession: GO:0010033](#)

**Ontology:** Biological Process

**Description:** response to organic substance

**Annotated/Total number in query list:** 74/899

ance: 820/31819

**Annotated/Total number in background/reference:** 210

log2(fold_change)	ID	Description
4.43433	AT4G34780	SAUR-like auxin-responsive protein family
3.63278	AT4G34800	SAUR-like auxin-responsive protein family
3.39559	AT2G24210	TPS10 terpene synthase 10
3.15638	AT5G24770	VSP2, ATVSP2 vegetative storage protein 2
3.14265	AT1G28480	GRX480, roxy19 Thioredoxin superfamily protein
3.12987	AT5G24780	VSP1, ATVSP1 vegetative storage protein 1
2.96913	AT2G02990	RNS1, ATRNS1 ribonuclease 1
2.70247	AT3G59220	PRN, PRN1, ATPIRIN1 pirin
2.55272	AT5G07010	ATST2A, ST2A sulfotransferase 2A
2.21629	AT3G20470	GRP-5, ATGRP-5, GRP5, ATGRP5 glycine-rich protein
2.11075	AT3G16470	JR1 Mannose-binding lectin superfamily protein
2.04482	AT5G15960	KIN1 stress-responsive protein (KIN1) / stress-inducible
1.98703	AT3G23250	MYB15, ATY19, ATMYB15 myb domain protein
1.96538	AT4G23600	CORI3, JR2 Tyrosine transaminase family protein
1.86974	AT2G44840	ERF13, EREBP, ERF13 ethylene-responsive element binding factor
1.86582	AT1G05560	UGT1, UGT75B1 UDP-glucosyltransferase 75B1
1.84087	AT4G25000	ATAMY1, AMY1 alpha-amylase-like
1.83347	AT2G41070	EEL, ATBZIP12, DPBF4 Basic-leucine zipper (bZIP) family protein
1.76315	AT2G34810	FAD-binding Berberine family protein
1.75456	AT1G18710	AtMYB47, MYB47 myb domain protein 47
1.71555	AT5G59220	HAI1 highly ABA-induced PP2C gene 1
1.70289	AT5G17490	RGL3 RGA-like protein 3
1.68068	AT1G56650	PAP1, MYB75, SIAA1, ATMYB75
1.66102	ATCG00490	RBCL ribulose-bisphosphate carboxylases
1.65771	AT1G54040	ESP, TASTY, ESR epithiospecifier protein
1.65291	AT5G07700	MYB76, AtMYB76 myb domain protein 76
1.61193	AT5G59320	LTP3 lipid transfer protein 3
1.57678	AT2G45210	SAUR-like auxin-responsive protein family
1.56413	AT1G69260	AFP1 ABI five binding protein
1.55906	AT5G59780	MYB59, ATMYB59, ATMYB59-1 myb domain protein
1.55131	AT5G15970	KIN2, COR6 stress-responsive protein (KIN2) /
1.54878	AT4G15910	ATI21, DI21 drought-induced 21
1.54072	AT1G19570	DHAR1, ATDHAR1, DHAR5 dehydroascorbate reductase
1.51773	AT3G45140	LOX2, ATLOX2 lipoxygenase 2
1.5068	AT1G74430	MYB95, ATMYB95, ATMYBCP66 myb domain protein

1.46705	AT2G33380	RD20, CLO-3 Caleosin-related family protein
1.43569	AT2G32690	ATGRP23, GRP23 glycine-rich protein 23
1.43225	AT2G05520	RP-3, ATGRP-3, GRP3, ATGRP3 glycine-rich prote
1.39232	AT1G19640	JMT jasmonic acid carboxyl methyltransferase
1.38519	AT1G76180	ERD14 Dehydrin family protein
1.38181	AT1G17380	JAZ5, TIFY11A jasmonate-zim-domain protein 5
1.28822	AT5G44420	PDF1, PDF1A, LCR77 plant defensin 1
1.28492	AT5G67480	BT4, ATBT4 BTB and TAZ domain
1.27397	AT5G66400	RAB18, ATDI8 Dehydrin family protein
1.26261	AT5G67300	ATMYB1, ATMYB44, MYB1, MYB44 myb domai
1.24913	AT5G65420	CYCD4;1 CYCLIN D4;1
1.24725	AT5G52310	LTI78, RD29A, LTI140 low-temperature-respons
1.18991	AT3G61190	BAP1 BON association protein 1
1.16667	AT1G70700	JAZ9, TIFY7 TIFY domain/Divergent CCT motif
1.16581	AT2G47190	ATMYB2, MYB2 myb domain protein 2
1.15482	AT2G25930	PYK20 hydroxyproline-rich glycoprotein family p
1.15464	AT2G39800	delta1, ATP5CS delta1-pyrroline-5-carboxylate synth
1.13015	AT2G26740	ATSEH, SEH soluble epoxide hydrolase
1.10371	AT3G15500	ATNAC3, ANAC055, NAC055, NAC3 NAC domain
1.09833	AT5G54490	PBP1 pinoid-binding protein 1
1.09545	AT1G01720	ATAF1, ANAC002 NAC (No Apical Meristem)
1.09387	AT1G29395	COR413-TM1, COR413IM1, COR413-TM1 COLD REGULA
1.08713	AT5G43170	AZF3, ZF3 zinc-finger protein 3
1.08527	AT2G34600	JAZ7, TIFY5B jasmonate-zim-domain protein 7
1.08115	AT1G54060	ASIL1 6B-interacting protein 1-like 1
1.05358	AT2G37430	C2H2 and C2HC zinc fingers superfamily
1.05064	AT3G46130	ATMYB48, ATMYB48-3, MYB48 myb domain prote
1.03407	AT2G23430	KRP1, KRP1 Cyclin-dependent kinase inhibitor fami
1.03183	AT2G29420	GSTU7, GST25, GSTU7 glutathione S-transferase
1.02636	AT3G09940	MDAR3, MDAR3, MDAR2 monodehydroascorba
1.02184	AT2G46270	GBF3 G-box binding factor 3
1.00884	AT3G46620	zinc finger (C3HC4-type RING finger) family
	AT4G34000	DPBF5 abscisic acid responsive elements-binc
	AT4G13520	SMAP1 small acidic protein 1

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[GO Accession: GO:](#)

**Ontology:** Biol

**Description:** r

**Annotated/To**

**Annotated/To**

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log2(fold_change)	ID
4.43433	AT2G24210
3.63278	AT5G24770
3.39559	AT2G02990
3.15638	AT4G16740
3.14265	AT3G11480
3.12987	AT1G52030
2.96913	AT3G16470
2.70247	AT4G23600
2.55272	AT1G32640
2.11075	AT1G43160
2.04482	AT2G06050
1.98703	AT2G34810
1.96538	AT4G15440
1.86974	AT3G45140
1.86582	AT4G10390
1.85097	AT4G24350
1.84087	AT5G10300
1.76315	AT1G74930
1.71555	AT1G19640
1.70289	AT5G44420
1.68068	AT2G22330
1.66102	AT3G61190
1.65771	AT1G66760
1.65291	AT1G01720
1.61193	AT1G51760
1.57678	AT4G24220
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[J009611](#)

ogical Process

esponse to wounding

total number in query list: 26/899

total number in background/reference: 30/31819

Description	log2(fold_change)
TPS10 terpene synthase 10	3.39559
VSP2, ATVSP2 vegetative storage protein 2	3.15638
RNS1, ATRNS1 ribonuclease 1	2.96913
ATTPS03, TPS03 terpene synthase 03	2.79044
unknown protein; Has 23 Blast hits	2.33413
MBP2, MBP1, F-ATMBP myrosinase-binding protein 2	2.19977
JR1 Mannose-binding lectin superfamily protein	2.04482
CORI3, JR2 Tyrosine transaminase family protein	1.86974
ATMYC2, RD22BP1, JAI1, JIN1, MYC2, ZBF1	1.83347
RAP2 related to AP2 6	1.77261
OPR3 oxophytodienoate-reductase 3	1.76284
FAD-binding Berberine family protein	1.71555
HPL1, CYP74B2 hydroperoxide lyase 1	1.64373
LOX2, ATLOX2 lipoxygenase 2	1.46705
Protein kinase superfamily protein	1.42175
Phosphorylase superfamily protein	1.39665
ATMES5, MES5, HNL methyl esterase 5	1.36514
ORA47 Integrase-type DNA-binding superfamily protein	1.35594
JMT jasmonic acid carboxyl methyltransferase	1.28822
PDF1, PDF1A, LCR77 plant defensin 1	1.26261
CYP79B3 Cytochrome P450	1.18528
BAP1 BON association protein 1	1.16651
MATE efflux family protein	1.12524
ATAF1, ANAC002 NAC (No Apical Meristem)	1.09387
IAR3, JR3 peptidase M20/M25/M40 family protein	1.07374
VEP1, AWI31 NAD(P)-binding Rossmann-fold superfamily prote	1.01699

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[GO Accession: GO:0009415](#)

**Ontology:** Biological Process

**Description:** response to water

**Annotated/Total number in query list:** 26/899

**Annotated/Total number in background/reference**

<b>ID</b>	<b>Description</b>
AT5G59310	LTP4 lipid transfer protein 4
AT1G52890	ANAC019, NAC019 NAC domain containing protein
AT5G15960	N1 stress-responsive protein (KIN1) / stress-induc
AT1G32640	ATMYC2, RD22BP1, JAI1, JIN1, MYC2, ZBF1
AT5G59220	HAI1 highly ABA-induced PP2C gene 1
AT5G59320	LTP3 lipid transfer protein 3
AT5G15970	KIN2, COR6 stress-responsive protein (KIN2) /
AT4G15910	ATDI21, DI21 drought-induced 21
AT3G45140	LOX2, ATLOX2 lipoxygenase 2
AT3G05640	Protein phosphatase 2C family protein
AT2G33380	RD20, CLO-3 Calciosin-related family protein
AT2G05520	GRP-3, ATGRP-3, GRP3, ATGRP3 glycine-rich protein
AT1G76180	ERD14 Dehydrin family protein
AT5G66400	RAB18, ATDI8 Dehydrin family protein
AT5G67300	ATMYBR1, ATMYB44, MYBR1, MYB44 myb domain
AT5G52310	LTI78, RD29A, LTI140 low-temperature-responsi
AT2G47190	ATMYB2, MYB2 myb domain protein 2
AT2G39800	S1, ATP5CS delta1-pyrroline-5-carboxylate syntha
AT2G26740	ATSEH, SEH soluble epoxide hydrolase
AT3G15500	ATNAC3, ANAC055, NAC055, NAC3 NAC domain
AT1G29395	COR413-TM1, COR413IM1, COR413-TM1 COLD REGULAT
AT2G18050	HIS1-3 histone H1-3
AT3G09940	TMDAR3, MDAR3, MDAR2 monodehydroascorbat
AT5G61900	BON1, BON Calcium-dependent phospholipid-bind
AT3G50970	LTI30, XERO2 dehydrin family protein
AT4G34000	DPBF5 abscisic acid responsive elements-bindin









e: 37/31819

[GO Accession: GO:000](#)

**Ontology: Biolog**

**Description: resp**

**Annotated/Total**

**Annotated/Total**

<b>log2(fold_change)</b>	<b>ID</b>
2.21629	AT4G37990
2.20315	AT2G24210
1.98703	AT5G24770
1.83347	AT5G24780
1.68068	AT2G02990
1.56413	AT4G16740
1.54072	AT4G23680
1.51773	AT1G52040
1.46705	AT3G11480
1.43642	AT2G43510
1.43225	AT5G59310
1.38181	AT1G52890
1.28492	AT1G52030
1.24725	AT3G03190
1.18991	AT2G42540
1.16667	AT3G16470
1.15482	AT4G37150
1.13015	AT1G19610
1.10371	AT1G07400
1.09833	AT5G15960
1.08713	AT3G23250
1.06144	AT1G54050
1.03407	AT4G23600
1.0296	AT1G32640
1.02636	AT1G43160
1.02184	AT2G06050
	AT2G21660
	AT2G38750
	AT2G34810
	AT2G22080
	AT1G18710
	AT2G43535
	AT2G47180
	AT5G59220
	AT1G56650

AT4G15440

AT3G26420

AT2G23620

AT1G54040

AT5G59320

AT1G19670

AT5G16980

AT5G59780

AT5G15970

AT4G15910

AT1G50460

AT3G45140

AT3G05640

AT2G42530

AT2G33380

AT4G12480

AT4G10390

AT4G24350

AT5G07690

AT2G05520

AT5G10300

AT2G29450

AT1G74930

AT1G58848

AT1G19640

AT1G76180

AT5G65050

AT5G44420

AT5G61600

AT5G66400

AT2G27720

AT1G66100

AT5G67300

AT2G22330

AT2G43530

AT5G52310

AT3G61190

AT2G47190

AT2G25930

AT1G30480

AT2G23560

AT1G77000  
AT2G39800  
AT2G26020  
AT1G66760  
AT4G37000  
AT1G58807  
AT2G26740  
AT3G15500  
AT5G05340  
AT1G01720  
AT4G39030  
AT1G29395  
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AT5G54810  
AT2G18050  
AT3G46130  
AT5G37055  
AT3G09940  
AT5G61900  
AT4G13850  
AT3G50970  
AT4G34000  
AT2G43550  
AT3G62550  
AT4G24220  
AT5G58070  
AT3G55460



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6950

Biological Process

Response to stress

number in query list: 107/899

number in background/reference: 456/31819

GO Accession: GO

Ontology: Biological Process

Description: response to stress

Number of genes annotated/Total genes

Number of genes annotated/Total genes

Description	log2(fold_change)	ID
GLUCANASE2, ELI3, ATCAD8, CAD-B2 elicitor-activated protein 2	3.85242	AT2G24210
TPS10 terpene synthase 10	3.39559	AT5G24770
VSP2, ATVSP2 vegetative storage protein 2	3.15638	AT5G24780
VSP1, ATVSP1 vegetative storage protein 1	3.12987	AT5G07010
RNS1, ATRNS1 ribonuclease 1	2.96913	AT3G16470
ATTPS03, TPS03 terpene synthase 03	2.79044	AT3G23250
GLYCEROL-3-phosphate cyclase/dehydrase and lipid transport subunit 1	2.59817	AT4G23600
MBP1, ATMBP myrosinase-binding protein 1	2.56372	AT1G32640
unknown protein; Has 23 Blast hits	2.33413	AT2G34810
ATTI1, TI1 trypsin inhibitor protein 1	2.27947	AT1G18710
LTP4 lipid transfer protein 4	2.21629	AT1G56650
NAC019, NAC019 NAC domain containing protein 19	2.20315	AT1G54040
MBP1, F-ATMBP myrosinase-binding protein 1	2.19977	AT5G07700
GSTF11, ATGSTF6, GSTF11 glutathione S-transferase 11	2.14509	AT1G19570
COR15A, COR15 cold-regulated 15a	2.12301	AT3G45140
Mannose-binding lectin superfamily protein 9	2.04482	AT1G74430
ATMES9, MES9 methyl esterase 9	2.04376	AT5G07690
PDF1, PDF1 Arabidopsis defensin-like protein 1	2.03939	AT1G19640
HSP20-like chaperones superfamily protein 1	1.99185	AT1G17380
stress-responsive protein (KIN1) / stress-inducible protein 1	1.98703	AT5G44420
MYB15, ATY19, ATMYB15 myb domain protein 15	1.96538	AT5G67300
HSP20-like chaperones superfamily protein 1	1.90882	AT1G70700
JR13, JR2 Tyrosine transaminase family protein 13	1.86974	AT3G15500
ATMYC2, RD22BP1, JAI1, JIN1, MYC2, ZBF1	1.83347	AT2G34600
RAP2 related to AP2 6	1.77261	AT3G46130
OPR3 oxophytodienoate-reductase 3	1.76284	AT3G09940
TGRP7, CCR2, GR-RBP7, GRP7 cold, circadian rhythm protein 7	1.76051	
ANNAT4 annexin 4	1.75456	
FAD-binding Berberine family protein 1	1.71555	
unknown protein; Has 96314 Blast hits	1.70653	
AtMYB47, MYB47 myb domain protein 47	1.70289	
Scorpion toxin-like knottin superfamily protein 1	1.69972	
AtGolS1, GolS1 galactinol synthase 1	1.69777	
HAI1 highly ABA-induced PP2C gene 1	1.68068	
PAP1, MYB75, SIAA1, ATMYB75	1.65771	

HPL1, CYP74B2 hydroperoxide lyase 1	1.64373
RNA-binding (RRM/RBD/RNP motifs) family	1.62974
ATMES1, MES1 methyl esterase 1	1.61372
ESP, TASTY, ESR epithiospecifier protein	1.61193
LTP3 lipid transfer protein 3	1.56413
CLH1, COR11, ATHCOR1, CLH1 chlorophyllase	1.5608
Zinc-binding dehydrogenase family protein	1.55457
59, ATMYB59, ATMYB59-1 myb domain protein	1.54878
IN2, COR6 stress-responsive protein (KIN2)	1.54072
ATDI21, DI21 drought-induced 21	1.51773
HKL1, ATHKL1 hexokinase-like 1	1.47731
LOX2, ATLOX2 lipoxygenase 2	1.46705
Protein phosphatase 2C family protein	1.43642
COR15B cold regulated 15b	1.43547
RD20, CLO-3 Caleosin-related family protein	1.43225
1 Bifunctional inhibitor/lipid-transfer protein	1.42336
Protein kinase superfamily protein	1.42175
Phosphorylase superfamily protein	1.39665
IYB29, ATMYB29, PMG2 myb domain protein	1.39232
-3, ATGRP-3, GRP3, ATGRP3 glycine-rich protein	1.38181
ATMES5, MES5, HNL methyl esterase 5	1.36514
ATGSTU1, AT103-1A, GSTU5 glutathione S-	1.35806
7 Integrase-type DNA-binding superfamily protein	1.35594
ase resistance protein (CC-NBS-LRR class) family	1.29601
VT jasmonic acid carboxyl methyltransferase	1.28822
ERD14 Dehydrin family protein	1.28492
AGL31, MAF2 AGAMOUS-like 31	1.28147
PDF1, PDF1A, LCR77 plant defensin 1	1.26261
ERF104 ethylene response factor 104	1.26214
RAB18, ATDI8 Dehydrin family protein	1.24725
60S acidic ribosomal protein family	1.22207
Plant thionin	1.20016
MYBR1, ATMYB44, MYBR1, MYB44 myb domain	1.18991
CYP79B3 Cytochrome P450	1.18528
Scorpion toxin-like knottin superfamily protein	1.16868
TI78, RD29A, LTI140 low-temperature-resistance	1.16667
BAP1 BON association protein 1	1.16651
ATMYB2, MYB2 myb domain protein 2	1.15482
YK20 hydroxyproline-rich glycoprotein family	1.15464
TI11 D111/G-patch domain-containing protein	1.1458
ATMES7, MES7 methyl esterase 7	1.14371

.TSKP2;2, SKP2B RNI-like superfamily protei	1.13058
ATP5CS delta1-pyrroline-5-carboxylate syn	1.13015
PDF1b plant defensin 1b	1.12661
MATE efflux family protein	1.12524
ACD2, ATRCCR accelerated cell death 2	1.12311
ase resistance protein (CC-NBS-LRR class) fa	1.11664
ATSEH, SEH soluble epoxide hydrolase	1.10371
NAC3, ANAC055, NAC055, NAC3 NAC doma	1.09833
Peroxidase superfamily protein	1.09607
ATAF1, ANAC002 NAC (No Apical Meristem)	1.09387
EDS5, SID1 MATE efflux family protein	1.09045
M1, COR413IM1, COR413-TM1 COLD REGU	1.08713
AZF3, ZF3 zinc-finger protein 3	1.08569
AtMYB70, MYB70 myb domain protein 70	1.08316
Mannose-binding lectin superfamily proteir	1.07626
3, JR3 peptidase M20/M25/M40 family pro	1.07374
GRP2, CSDP2, CSP2, ATCSP2 glycine rich	1.06675
B1, TRPB, TRP2, ATTSB1 tryptophan syntha	1.06539
HIS1-3 histone H1-3	1.06144
MYB48, ATMYB48-3, MYB48 myb domain pro	1.05358
ATSWC6, SEF HIT-type Zinc finger family	1.04813
DAR3, MDAR3, MDAR2 monodehydroascor	1.03407
1, BON Calcium-dependent phospholipid-b	1.0296
2, GR-RBP2, GRP2 glycine-rich RNA-binding	1.0276
LTI30, XERO2 dehydrin family protein	1.02636
DPBF5 abscisic acid responsive elements-b	1.02184
orpion toxin-like knottin superfamily prote	1.02093
nucleotide alpha hydrolases-like superfam	1.0193
131 NAD(P)-binding Rossmann-fold superfa	1.01699
ATTIL, TIL temperature-induced lipocalin	1.01675
SCL30, At-SCL30 SC35-like splicing factor 3C	1.01309





[:0009753](#)

Biological Process

response to jasmonic acid stimulus

total number in query list: 28/899

total number in background/reference: 152/318

[GO Accession: GO:0](#)

Ontology: Biol

Description: re

Annotated/Tot

Annotated/Tot

Description	log2(fold_change)	ID
TPS10 terpene synthase 10	3.39559	AT4G34780
ATVSP2, ATVSP2 vegetative storage protei	3.15638	AT4G34800
ATVSP1, ATVSP1 vegetative storage protei	3.12987	AT3G23250
ATST2A, ST2A sulfotransferase 2A	2.55272	AT5G07700
mannose-binding lectin superfamily pr	2.04482	AT2G45210
ATY15, ATY19, ATMYB15 myb domain pr	1.96538	AT5G59780
ATY15, JR2 Tyrosine transaminase family p	1.86974	AT1G74430
ATMYC2, RD22BP1, JAI1, JIN1, MYC2, ZEP	1.83347	AT5G67480
FAD-binding Berberine family protein	1.71555	AT5G67300
ATMYB47, MYB47 myb domain protein	1.70289	AT2G25930
ATMYB75, PAP1, MYB75, SIAA1, ATMYB75	1.65771	AT2G26740
ATMYB76, TASTY, ESR epithiospecifier protei	1.61193	AT5G54490
ATMYB76, AtMYB76 myb domain protein	1.57678	AT1G54060
ATDHAR1, DHAR5 dehydroascorbate r	1.5068	AT4G13520
ATLOX2, ATLOX2 lipoxygenase 2	1.46705	
ATMYB95, ATMYBCP66 myb domain	1.43569	
ATMYB29, PMG2 myb domain pr	1.39232	
jasmonic acid carboxyl methyltransfe	1.28822	
TIFY11A jasmonate-zim-domain prot	1.27397	
PDF1, PDF1A, LCR77 plant defensin 1	1.26261	
ATMYB44, MYBR1, MYB44 myb c	1.18991	
TIFY7 TIFY domain/Divergent CCT n	1.16581	
ANAC055, NAC055, NAC3 NAC dc	1.09833	
TIFY5B jasmonate-zim-domain prot	1.08527	
ATMYB48-3, MYB48 myb domain	1.05358	
MDAR3, MDAR2 monodehydroas	1.03407	



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[1009733](#)

Biological Process

Response to auxin stimulus

Total number in query list: 14/899

Total number in background/reference: 29/31

[GO Accession: GO:00097](#)

Ontology: Biologic

Description: respo

Annotated/Total n

Annotated/Total n

Description	log2(fold_change)	ID
UR-like auxin-responsive protein family 15, ATY19, ATMYB15 myb domain protein 1/B76, AtMYB76 myb domain protein	4.43433	AT3G59220
UR-like auxin-responsive protein family 15, ATY19, ATMYB15 myb domain protein 1/B76, AtMYB76 myb domain protein	3.63278	AT5G59310
UR-like auxin-responsive protein family 15, ATY19, ATMYB15 myb domain protein 1/B76, AtMYB76 myb domain protein	1.96538	AT3G20470
UR-like auxin-responsive protein family 15, ATY19, ATMYB15 myb domain protein 1/B76, AtMYB76 myb domain protein	1.57678	AT5G15960
UR-like auxin-responsive protein family 15, ATY19, ATMYB15 myb domain protein 1/B76, AtMYB76 myb domain protein	1.55906	AT4G23600
ATMYB59, ATMYB59-1 myb domain protein	1.54878	AT4G25000
ATMYB95, ATMYBCP66 myb domain protein	1.43569	AT1G32640
BT4, ATBT4 BTB and TAZ domain protein	1.24913	AT2G41070
MYB44, ATMYB44, MYBR1, MYB44 myb domain protein	1.18991	AT2G38750
Hydroxyproline-rich glycoprotein family 1, HPG1, HPG1L, HPG1S, HPG1T, HPG1U, HPG1V, HPG1W, HPG1X, HPG1Y, HPG1Z, HPG1AA, HPG1AB, HPG1AC, HPG1AD, HPG1AE, HPG1AF, HPG1AG, HPG1AH, HPG1AI, HPG1AJ, HPG1AK, HPG1AL, HPG1AM, HPG1AN, HPG1AO, HPG1AP, HPG1AQ, HPG1AR, HPG1AS, HPG1AT, HPG1AU, HPG1AV, HPG1AW, HPG1AX, HPG1AY, HPG1AZ, HPG1BA, HPG1BB, HPG1BC, HPG1BD, HPG1BE, HPG1BF, HPG1BG, HPG1BH, HPG1BI, HPG1BJ, HPG1BK, HPG1BL, HPG1BM, HPG1BN, HPG1BO, HPG1BP, HPG1BQ, HPG1BR, HPG1BS, HPG1BT, HPG1BU, HPG1BV, HPG1BW, HPG1BX, HPG1BY, HPG1BZ, HPG1CA, HPG1CB, HPG1CC, HPG1CD, HPG1CE, HPG1CF, HPG1CG, HPG1CH, HPG1CI, HPG1CJ, HPG1CK, HPG1CL, HPG1CM, HPG1CN, HPG1CO, HPG1CP, HPG1CQ, HPG1CR, HPG1CS, HPG1CT, HPG1CU, HPG1CV, HPG1CW, HPG1CX, HPG1CY, HPG1CZ, HPG1DA, HPG1DB, HPG1DC, HPG1DD, HPG1DE, HPG1DF, HPG1DG, HPG1DH, HPG1DI, HPG1DJ, HPG1DK, HPG1DL, HPG1DM, HPG1DN, HPG1DO, HPG1DP, HPG1DQ, HPG1DR, HPG1DS, HPG1DT, HPG1DU, HPG1DV, HPG1DW, HPG1DX, HPG1DY, HPG1DZ, HPG1EA, HPG1EB, HPG1EC, HPG1ED, HPG1EE, HPG1EF, HPG1EG, HPG1EH, HPG1EI, HPG1EJ, HPG1EK, HPG1EL, HPG1EM, HPG1EN, HPG1EO, HPG1EP, HPG1EQ, HPG1ER, HPG1ES, HPG1ET, HPG1EU, HPG1EV, HPG1EW, HPG1EX, HPG1EY, HPG1EZ, HPG1FA, HPG1FB, HPG1FC, HPG1FD, HPG1FE, HPG1FF, HPG1FG, HPG1FH, HPG1FI, HPG1FJ, HPG1FK, HPG1FL, HPG1FM, HPG1FN, HPG1FO, HPG1FP, HPG1FQ, HPG1FR, HPG1FS, HPG1FT, HPG1FU, HPG1FV, HPG1FW, HPG1FX, HPG1FY, HPG1FZ, HPG1GA, HPG1GB, HPG1GC, HPG1GD, HPG1GE, HPG1GF, HPG1GG, HPG1GH, HPG1GI, HPG1GJ, HPG1GK, HPG1GL, HPG1GM, HPG1GN, HPG1GO, HPG1GP, HPG1GQ, HPG1GR, HPG1GS, HPG1GT, HPG1GU, HPG1GV, HPG1GW, HPG1GX, HPG1GY, HPG1GZ, HPG1HA, HPG1HB, HPG1HC, HPG1HD, HPG1HE, HPG1HF, HPG1HG, HPG1HH, HPG1HI, HPG1HJ, HPG1HK, HPG1HL, HPG1HM, HPG1HN, HPG1HO, HPG1HP, HPG1HQ, HPG1HR, HPG1HS, HPG1HT, HPG1HU, HPG1HV, HPG1HW, HPG1HX, HPG1HY, HPG1HZ, HPG1IA, HPG1IB, HPG1IC, HPG1ID, HPG1IE, HPG1IF, HPG1IG, HPG1IH, HPG1II, HPG1IJ, HPG1IK, HPG1IL, HPG1IM, HPG1IN, HPG1IO, HPG1IP, HPG1IQ, HPG1IR, HPG1IS, HPG1IT, HPG1IU, HPG1IV, HPG1IW, HPG1IX, HPG1IY, HPG1IZ, HPG1JA, HPG1JB, HPG1JC, HPG1JD, HPG1JE, HPG1JF, HPG1JG, HPG1JH, HPG1JI, HPG1JJ, HPG1JK, HPG1JL, HPG1JM, HPG1JN, HPG1JO, HPG1JP, HPG1JQ, HPG1JR, HPG1JS, HPG1JT, HPG1JU, HPG1JV, HPG1JW, HPG1JX, HPG1JY, HPG1JZ, HPG1KA, HPG1KB, HPG1KC, HPG1KD, HPG1KE, HPG1KF, HPG1KG, HPG1KH, HPG1KI, HPG1KJ, HPG1KK, HPG1KL, HPG1KM, HPG1KN, HPG1KO, HPG1KP, HPG1KQ, HPG1KR, HPG1KS, HPG1KT, HPG1KU, HPG1KV, HPG1KW, HPG1KX, HPG1KY, HPG1KZ, HPG1LA, HPG1LB, HPG1LC, HPG1LD, HPG1LE, HPG1LF, HPG1LG, HPG1LH, HPG1LI, HPG1LJ, HPG1LK, HPG1LL, HPG1LM, HPG1LN, HPG1LO, HPG1LP, HPG1LQ, HPG1LR, HPG1LS, HPG1LT, HPG1LU, HPG1LV, HPG1LW, HPG1LX, HPG1LY, HPG1LZ, HPG1MA, HPG1MB, HPG1MC, HPG1MD, HPG1ME, HPG1MF, HPG1MG, HPG1MH, HPG1MI, HPG1MJ, HPG1MK, HPG1ML, HPG1MM, HPG1MN, HPG1MO, HPG1MP, HPG1MQ, HPG1MR, HPG1MS, HPG1MT, HPG1MU, HPG1MV, HPG1MW, HPG1MX, HPG1MY, HPG1MZ, HPG1NA, HPG1NB, HPG1NC, HPG1ND, HPG1NE, HPG1NF, HPG1NG, HPG1NH, HPG1NI, HPG1NJ, HPG1NK, HPG1NL, HPG1NM, HPG1NN, HPG1NO, HPG1NP, HPG1NQ, HPG1NR, HPG1NS, HPG1NT, HPG1NU, HPG1NV, HPG1NW, HPG1NX, HPG1NY, HPG1NZ, HPG1OA, HPG1OB, HPG1OC, HPG1OD, HPG1OE, HPG1OF, HPG1OG, HPG1OH, HPG1OI, HPG1OJ, HPG1OK, HPG1OL, HPG1OM, HPG1ON, HPG1OO, HPG1OP, HPG1OQ, HPG1OR, HPG1OS, HPG1OT, HPG1OU, HPG1OV, HPG1OW, HPG1OX, HPG1OY, HPG1OZ, HPG1PA, HPG1PB, HPG1PC, HPG1PD, HPG1PE, HPG1PF, HPG1PG, HPG1PH, HPG1PI, HPG1PJ, HPG1PK, HPG1PL, HPG1PM, HPG1PN, HPG1PO, HPG1PP, HPG1PQ, HPG1PR, HPG1PS, HPG1PT, HPG1PU, HPG1PV, HPG1PW, HPG1PX, HPG1PY, HPG1PZ, HPG1QA, HPG1QB, HPG1QC, HPG1QD, HPG1QE, HPG1QF, HPG1QG, HPG1QH, HPG1QI, HPG1QJ, HPG1QK, HPG1QL, HPG1QM, HPG1QN, HPG1QO, HPG1QP, HPG1QQ, HPG1QR, HPG1QS, HPG1QT, HPG1QU, HPG1QV, HPG1QW, HPG1QX, HPG1QY, HPG1QZ, HPG1RA, HPG1RB, HPG1RC, HPG1RD, HPG1RE, HPG1RF, HPG1RG, HPG1RH, HPG1RI, HPG1RJ, HPG1RK, HPG1RL, HPG1RM, HPG1RN, HPG1RO, HPG1RP, HPG1RQ, HPG1RR, HPG1RS, HPG1RT, HPG1RU, HPG1RV, HPG1RW, HPG1RX, HPG1RY, HPG1RZ, HPG1SA, HPG1SB, HPG1SC, HPG1SD, HPG1SE, HPG1SF, HPG1SG, HPG1SH, HPG1SI, HPG1SJ, HPG1SK, HPG1SL, HPG1SM, HPG1SN, HPG1SO, HPG1SP, HPG1SQ, HPG1SR, HPG1SS, HPG1ST, HPG1SU, HPG1SV, HPG1SW, HPG1SX, HPG1SY, HPG1SZ, HPG1TA, HPG1TB, HPG1TC, HPG1TD, HPG1TE, HPG1TF, HPG1TG, HPG1TH, HPG1TI, HPG1TJ, HPG1TK, HPG1TL, HPG1TM, HPG1TN, HPG1TO, HPG1TP, HPG1TQ, HPG1TR, HPG1TS, HPG1TT, HPG1TU, HPG1TV, HPG1TW, HPG1TX, HPG1TY, HPG1TZ, HPG1UA, HPG1UB, HPG1UC, HPG1UD, HPG1UE, HPG1UF, HPG1UG, HPG1UH, HPG1UI, HPG1UJ, HPG1UK, HPG1UL, HPG1UM, HPG1UN, HPG1UO, HPG1UP, HPG1UQ, HPG1UR, HPG1US, HPG1UT, HPG1UU, HPG1UV, HPG1UW, HPG1UX, HPG1UY, HPG1UZ, HPG1VA, HPG1VB, HPG1VC, HPG1VD, HPG1VE, HPG1VF, HPG1VG, HPG1VH, HPG1VI, HPG1VJ, HPG1VK, HPG1VL, HPG1VM, HPG1VN, HPG1VO, HPG1VP, HPG1VQ, HPG1VR, HPG1VS, HPG1VT, HPG1VU, HPG1VV, HPG1VW, HPG1VX, HPG1VY, HPG1VZ, HPG1WA, HPG1WB, HPG1WC, HPG1WD, HPG1WE, HPG1WF, HPG1WG, HPG1WH, HPG1WI, HPG1WJ, HPG1WK, HPG1WL, HPG1WM, HPG1WN, HPG1WO, HPG1WP, HPG1WQ, HPG1WR, HPG1WS, HPG1WT, HPG1WU, HPG1WV, HPG1WW, HPG1WX, HPG1WY, HPG1WZ, HPG1XA, HPG1XB, HPG1XC, HPG1XD, HPG1XE, HPG1XF, HPG1XG, HPG1XH, HPG1XI, HPG1XJ, HPG1XK, HPG1XL, HPG1XM, HPG1XN, HPG1XO, HPG1XP, HPG1XQ, HPG1XR, HPG1XS, HPG1XT, HPG1XU, HPG1XV, HPG1XW, HPG1XX, HPG1XY, HPG1XZ, HPG1YA, HPG1YB, HPG1YC, HPG1YD, HPG1YE, HPG1YF, HPG1YG, HPG1YH, HPG1YI, HPG1YJ, HPG1YK, HPG1YL, HPG1YM, HPG1YN, HPG1YO, HPG1YP, HPG1YQ, HPG1YR, HPG1YS, HPG1YT, HPG1YU, HPG1YV, HPG1YW, HPG1YX, HPG1YY, HPG1YZ, HPG1ZA, HPG1ZB, HPG1ZC, HPG1ZD, HPG1ZE, HPG1ZF, HPG1ZG, HPG1ZH, HPG1ZI, HPG1ZJ, HPG1ZK, HPG1ZL, HPG1ZM, HPG1ZN, HPG1ZO, HPG1ZP, HPG1ZQ, HPG1ZR, HPG1ZS, HPG1ZT, HPG1ZU, HPG1ZV, HPG1ZW, HPG1ZX, HPG1ZY, HPG1ZZ	1.09545	AT5G59320
ASIL1 6B-interacting protein 1-like 1	1.08115	AT1G69260
SMAP1 small acidic protein 1	1.00884	AT5G15970
		AT4G15910
		AT2G33380
		AT2G32690
		AT2G05520
		AT1G76180
		AT5G66400
		AT5G67300
		AT5G52310
		AT2G47190
		AT2G25930
		AT2G39800
		AT1G01720
		AT1G29395
		AT3G46130
		AT2G23430
		AT2G46270
		AT3G50970
		AT4G34000

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37

al Process

se to abscisic acid stimulus

number in query list: 32/899

number in background/reference

[GO Accession: GO:0](#)

Ontology: Biol

Description: re

Annotated/Tot

Annotated/Tot

Description	log2(fold_change)	ID
RN, PRN1, ATPIRIN1 piri	2.70247	AT5G59310
P4 lipid transfer protein	2.21629	AT1G52890
-5, GRP5, ATGRP5 glycir	2.11075	AT5G15960
ponsive protein (KIN1) /	1.98703	AT1G32640
tyrosine transaminase fa	1.86974	AT5G59220
Y1, AMY1 alpha-amylas	1.84087	AT5G59320
RD22BP1, JAI1, JIN1, M'	1.83347	AT5G15970
L2, DPBF4 Basic-leucine	1.76315	AT4G15910
ANNAT4 annexin 4	1.75456	AT3G45140
ighly ABA-induced PP2C	1.68068	AT3G05640
ulose-bisphosphate cark	1.65291	AT2G33380
P3 lipid transfer protein	1.56413	AT2G05520
P1 ABI five binding prot	1.55131	AT1G76180
5 stress-responsive prote	1.54072	AT5G66400
21, DI21 drought-induce	1.51773	AT5G67300
-3 Caleosin-related fam	1.43225	AT5G52310
3, GRP23 glycine-rich pr	1.38519	AT2G47190
-3, GRP3, ATGRP3 glycir	1.38181	AT2G39800
14 Dehydrin family pro	1.28492	AT2G26740
ATDI8 Dehydrin family	1.24725	AT3G15500
MYB44, MYBR1, MYB44	1.18991	AT1G29395
9A, LTI140 low-temperat	1.16667	AT2G18050
2, MYB2 myb domain pr	1.15482	AT3G09940
oxyproline-rich glycopro	1.15464	AT3G50970
elta1-pyrroline-5-carbo	1.13015	AT4G34000
JAC002 NAC (No Apical I	1.09387	
13IM1, COR413-TM1 CC	1.08713	
MYB48-3, MYB48 myb d	1.05358	
clin-dependent kinase ir	1.05064	
3F3 G-box binding factor	1.03183	
XERO2 dehydrin family p	1.02636	
iscisic acid responsive el	1.02184	

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[1009414](#)

Biological Process

Response to water deprivation

Total number in query list: 25/899

Total number in background/reference: 32/31819

[GO Accession: GO:000](#)

Ontology: Biological

Description: response

Annotated/Total

Annotated/Total

Description	log2(fold_change)	ID
LTP4 lipid transfer protein 4	2.21629	AT2G42540
ANAC019, NAC019 NAC domain containing protein	2.20315	AT3G16470
KIN1 stress-responsive protein (KIN1) / stress-inducible	1.98703	AT5G15960
ATMYC2, RD22BP1, JAI1, JIN1, MYC2, ZBF1	1.83347	AT2G21660
HAI1 highly ABA-induced PP2C gene 1	1.68068	AT3G26420
LTP3 lipid transfer protein 3	1.56413	AT5G15970
KIN2, COR6 stress-responsive protein (KIN2) / stress-inducible	1.54072	AT1G50460
ATDI21, DI21 drought-induced 21	1.51773	AT2G42530
LOX2, ATLOX2 lipoxygenase 2	1.46705	AT2G33380
Protein phosphatase 2C family protein	1.43642	AT1G76180
RD20, CLO-3 Caleosin-related family protein	1.43225	AT5G65050
GRP-3, ATGRP-3, GRP3, ATGRP3 glycine-rich protein	1.38181	AT5G66400
ERD14 Dehydrin family protein	1.28492	AT2G27720
RAB18, ATDI8 Dehydrin family protein	1.24725	AT5G52310
ATMYBR1, ATMYB44, MYBR1, MYB44 myb domain protein	1.18991	AT3G61190
COR78, LTI78, RD29A, LTI140 low-temperature responsive	1.16667	AT2G25930
ATMYB2, MYB2 myb domain protein 2	1.15482	AT1G29395
P5CS1, ATP5CS delta1-pyrroline-5-carboxylate synthetase	1.13015	AT5G43170
ATSEH, SEH soluble epoxide hydrolase	1.10371	AT3G16460
ATNAC3, ANAC055, NAC055, NAC3 NAC domain containing protein	1.09833	AT4G38680
COR414-TM1, COR413IM1, COR413-TM1 COLT1	1.08713	AT4G13850
HIS1-3 histone H1-3	1.06144	AT3G50970
MDHAR, ATMDAR3, MDAR3, MDAR2 monodehydroascorbate reductase	1.03407	AT5G58070
LTI30, XERO2 dehydrin family protein	1.02636	
ABF3, DPBF5 abscisic acid responsive element	1.02184	

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[19409](#)

**Biological Process**

**Response to cold**

**Number in query list: 23/899**

**Number in background/reference: 28/31819**

Description	log2(fold_change)
COR15A, COR15 cold-regulated 15a	2.12301
JR1 Mannose-binding lectin superfamily protein	2.04482
V1 stress-responsive protein (KIN1) / stress-induc	1.98703
ATGRP7, CCR2, GR-RBP7, GRP7 cold, circadian	1.76051
1A RNA-binding (RRM/RBD/RNP motifs) family pr	1.62974
KIN2, COR6 stress-responsive protein (KIN2) /	1.54072
HKL1, ATHKL1 hexokinase-like 1	1.47731
COR15B cold regulated 15b	1.43547
RD20, CLO-3 Caleosin-related family protein	1.43225
ERD14 Dehydrin family protein	1.28492
AGL31, MAF2 AGAMOUS-like 31	1.28147
RAB18, ATDI8 Dehydrin family protein	1.24725
60S acidic ribosomal protein family	1.22207
, LTI78, RD29A, LTI140 low-temperature-responsi	1.16667
BAP1 BON association protein 1	1.16651
, PYK20 hydroxyproline-rich glycoprotein family p	1.15464
4-TM1, COR413IM1, COR413-TM1 COLD REGULAT	1.08713
AZF3, ZF3 zinc-finger protein 3	1.08569
Mannose-binding lectin superfamily protein	1.07626
GRP2, CSDP2, CSP2, ATCSP2 glycine rich	1.06675
RP2, GR-RBP2, GRP2 glycine-rich RNA-binding prc	1.0276
LTI30, XERO2 dehydrin family protein	1.02636
ATTIL, TIL temperature-induced lipocalin	1.01675

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[GO Accession: GO:0009266](#)

**Ontology: Biological Process**

**Description: response to temperature stimulus**

**Annotated/Total number in query list: 28/899**

**Annotated/Total number in background/reference: 51/318**

<b>ID</b>	<b>Description</b>
AT2G42540	COR15A, COR15 cold-regulated 15a
AT3G16470	JR1 Mannose-binding lectin superfamily protein
AT1G07400	HSP20-like chaperones superfamily protein
AT5G15960	KIN1 stress-responsive protein (KIN1) / stress-inducible
AT1G54050	HSP20-like chaperones superfamily protein
AT2G21660	ATGRP7, CCR2, GR-RBP7, GRP7 cold, circadian
AT2G47180	AtGolS1, GolS1 galactinol synthase 1
AT3G26420	ERF1 RNA-binding (RRM/RBD/RNP motifs) family protein
AT5G15970	KIN2, COR6 stress-responsive protein (KIN2) /
AT1G50460	HKL1, ATHKL1 hexokinase-like 1
AT2G42530	COR15B cold regulated 15b
AT2G33380	RD20, CLO-3 Caleosin-related family protein
AT1G76180	ERD14 Dehydrin family protein
AT5G65050	AGL31, MAF2 AGAMOUS-like 31
AT5G66400	RAB18, ATDI8 Dehydrin family protein
AT2G27720	60S acidic ribosomal protein family
AT5G52310	8, LTI78, RD29A, LTI140 low-temperature-responsive
AT3G61190	BAP1 BON association protein 1
AT2G25930	3, PYK20 hydroxyproline-rich glycoprotein family protein
AT1G77000	ATSKP2;2, SKP2B RNI-like superfamily protein
AT1G29395	4-TM1, COR413IM1, COR413-TM1 COLD REGULATED
AT5G43170	AZF3, ZF3 zinc-finger protein 3
AT3G16460	Mannose-binding lectin superfamily protein
AT4G38680	GRP2, CSDP2, CSP2, ATCSP2 glycine rich
AT5G61900	CPN1, BON Calcium-dependent phospholipid-binding
AT4G13850	5RP2, GR-RBP2, GRP2 glycine-rich RNA-binding protein
AT3G50970	LTI30, XERO2 dehydrin family protein
AT5G58070	ATTIL, TIL temperature-induced lipocalin









[GO Accession: GO:0009651](#)  
Ontology: Biological I  
Description: response  
Annotated/Total num  
Annotated/Total num

319

log2(fold_change)	ID
2.12301	AT5G24770
2.04482	AT3G23250
1.99185	AT4G23600
1.98703	AT1G18710
1.90882	AT1G56650
1.76051	AT5G59780
1.69777	AT1G50460
1.62974	AT2G33380
1.54072	AT5G67300
1.47731	AT5G52310
1.43547	AT2G47190
1.43225	AT2G39800
1.28492	AT5G43170
1.28147	AT2G23290
1.24725	AT3G46130
1.22207	AT4G34000
1.16667	
1.16651	
1.15464	
1.13058	
1.08713	
1.08569	
1.07626	
1.06675	
1.0296	
1.0276	
1.02636	
1.01675	

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Process

Response to salt stress

Number in query list: 16/899

Number in background/reference: 70/31819

Description	log2(fold_change)
VSP2, ATVSP2 vegetative storage protein 2	3.15638
MYB15, ATY19, ATMYB15 myb domain protein	1.96538
COR13, JR2 Tyrosine transaminase family protein	1.86974
AtMYB47, MYB47 myb domain protein 47	1.70289
PAP1, MYB75, SIAA1, ATMYB75	1.65771
MYB59, ATMYB59, ATMYB59-1 myb domain protein	1.54878
HKL1, ATHKL1 hexokinase-like 1	1.47731
RD20, CLO-3 Caleosin-related family protein	1.43225
ATMYBR1, ATMYB44, MYBR1, MYB44 myb domain	1.18991
78, LTI78, RD29A, LTI140 low-temperature-responsive	1.16667
ATMYB2, MYB2 myb domain protein 2	1.15482
5CS1, ATP5CS delta1-pyrroline-5-carboxylate synthase	1.13015
AZF3, ZF3 zinc-finger protein 3	1.08569
AtMYB70, MYB70 myb domain protein 70	1.08316
ATMYB48, ATMYB48-3, MYB48 myb domain protein	1.05358
ABF3, DPBF5 abscisic acid responsive elements-binding	1.02184

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[GO Accession: GO:0006970](#)

**Ontology: Biological Process**

**Description: response to osmotic stress**

**Annotated/Total number in query list: 22/899**

**Annotated/Total number in background/reference: 8/1000**

<b>ID</b>	<b>Description</b>
AT5G24770	VSP2, ATVSP2 vegetative storage protein 2
AT2G42540	COR15A, COR15 cold-regulated 15a
AT5G15960	N1 stress-responsive protein (KIN1) / stress-inducible
AT3G23250	MYB15, ATY19, ATMYB15 myb domain protein
AT4G23600	COR13, JR2 Tyrosine transaminase family protein
AT2G21660	ATGRP7, CCR2, GR-RBP7, GRP7 cold, circadian
AT2G38750	ANNAT4 annexin 4
AT1G18710	AtMYB47, MYB47 myb domain protein 47
AT1G56650	PAP1, MYB75, SIAA1, ATMYB75
AT5G59780	MYB59, ATMYB59, ATMYB59-1 myb domain protein
AT5G15970	KIN2, COR6 stress-responsive protein (KIN2) /
AT1G50460	HKL1, ATHKL1 hexokinase-like 1
AT2G33380	RD20, CLO-3 Caleosin-related family protein
AT5G67300	ATMYBR1, ATMYB44, MYBR1, MYB44 myb domain
AT5G52310	3, LTI78, RD29A, LTI140 low-temperature-responsive
AT2G47190	ATMYB2, MYB2 myb domain protein 2
AT2G39800	ATP5CS1, ATP5CS delta1-pyrroline-5-carboxylate synthase
AT5G43170	AZF3, ZF3 zinc-finger protein 3
AT2G23290	AtMYB70, MYB70 myb domain protein 70
AT3G46130	ATMYB48, ATMYB48-3, MYB48 myb domain protein
AT4G13850	GRP2, GR-RBP2, GRP2 glycine-rich RNA-binding protein
AT4G34000	DPBF5, DPBF5 abscisic acid responsive elements-binding











[GO Accession: GO:005170](#)

Ontology: Biological

Description: response to

Annotation: 31/31819

31/31819

log2(fold_change)	ID
3.15638	AT4G37990
2.12301	AT3G44300
1.98703	AT5G24770
1.96538	AT3G11480
1.86974	AT2G43510
1.76051	AT4G37150
1.75456	AT3G09260
1.70289	AT2G06050
1.65771	AT2G23620
1.54878	AT1G54040
1.54072	AT3G16400
1.47731	AT1G19570
1.43225	AT3G45140
1.18991	AT4G15210
1.16667	AT2G33380
1.15482	AT4G12480
1.13015	AT5G44420
1.08569	AT2G22330
1.08316	AT2G23560
1.05358	AT4G37000
1.0276	AT4G39030
1.02184	AT3G09940
	AT5G17520

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### il Process

ise to other organism

umber in query list: 26/899

umber in background/reference: 96/31819

Description	log2(fold_change)
I3-2, ELI3, ATCAD8, CAD-B2 elicitor-activated ge	3.85242
NIT2, AtNIT2 nitrilase 2	3.45531
VSP2, ATVSP2 vegetative storage protein 2	3.15638
unknown protein; Has 23 Blast hits	2.33413
ATTI1, TI1 trypsin inhibitor protein 1	2.27947
ATMES9, MES9 methyl esterase 9	2.04376
PYK10, PSR3, BGLU23, LEB Glycosyl hydrolase	1.7732
OPR3 oxophytodienoate-reductase 3	1.76284
ATMES1, MES1 methyl esterase 1	1.61372
ESP, TASTY, ESR epithiospecifier protein	1.61193
TMLP-470, NSP1, ATNSP1 nitrile specifier protei	1.58486
AR1, ATDHAR1, DHAR5 dehydroascorbate reduct	1.5068
LOX2, ATLOX2 lipoxygenase 2	1.46705
-AMY, AT-BETA-AMY, RAM1, BMY1, BAM5 beta-	1.45266
RD20, CLO-3 Caleosin-related family protein	1.43225
RLI 1 Bifunctional inhibitor/lipid-transfer protein	1.42336
PDF1, PDF1A, LCR77 plant defensin 1	1.26261
CYP79B3 Cytochrome P450	1.18528
ATMES7, MES7 methyl esterase 7	1.14371
ACD2, ATRCCR accelerated cell death 2	1.12311
EDS5, SID1 MATE efflux family protein	1.09045
MDAR3, MDAR3, MDAR2 monodehydroascorba	1.03407
RCP1, MEX1 root cap 1 (RCP1)	1.01155