

			20		40		60		
AtLNG1_cDNA	GAGCTT	TGTC	AT						12
AtSEX1_cDNA	HAATCT	TCTGC	AAAT	TCGTGGT	TTGTGAAACAC	AAAGAGAAAAA	AAAAAA	AAAAA	70
AtNPQ1_cDNA	GAGATA	AT							9
AtMAX3_cDNA	ATGTC	TCTCC	CT						12
AtHY2_cDNA	GTCTC	ACTG							9
AtGUN4_cDNA	GACGT								5
AtTRY_cDNA	CTTCT	CTC							8
		80		100		120		140	
AtLNG1_cDNA				AAA	TTTTATTGT	AA		GA	ATAAATAAAAA
AtSEX1_cDNA	TAAAAA	AAAGC	TAAAA	TCAAC	GTTGAGA	AGA	TTC	TGATAT	AAATAAGAAAA
AtNPQ1_cDNA									TATCACC
AtMAX3_cDNA									AA
AtHY2_cDNA									AA
AtGUN4_cDNA									ACTGTG
AtTRY_cDNA									
		160		180		200			
AtLNG1_cDNA	AT							TCAATTACA	TTCT
AtSEX1_cDNA	AA	GAA	GAA	CA	AAG	AGC	GAA	GAAG	AAAC
AtNPQ1_cDNA									CCCCCA
AtMAX3_cDNA	TT								GC
AtHY2_cDNA									ACT
AtGUN4_cDNA									CACT
AtTRY_cDNA									CACT
		220		240		260		280	
AtLNG1_cDNA			CTTACA	ATGT	ATAAA	TCT	TACGG	ATACA	CACGA
AtSEX1_cDNA			CTGTC	ATGT	ATCAG	TTT	CTCG		
AtNPQ1_cDNA			CA	ACC	GC	CT	AGG	AC	AA
AtMAX3_cDNA			CTT	CC	AC	CG	AT	T	CC
AtHY2_cDNA			CTT	TT	A	AGA			
AtGUN4_cDNA			TTCT	CT	CT				
AtTRY_cDNA			CTT	CT	CT				
		300		320		340		360	
AtLNG1_cDNA			ACG	CA	T	GT	AT	GT	AC
AtSEX1_cDNA	AG	T	GA	CA	AG	A	AG	T	AG
AtNPQ1_cDNA			AG	G	CT	T	CA	T	AG
AtMAX3_cDNA			CC	G	CT	T	GC	AC	
AtHY2_cDNA									
AtGUN4_cDNA			CC	AC	CA	CT			
AtTRY_cDNA									
		360		380		400		420	
AtLNG1_cDNA	AT	CG	CT	T	GA	A			AG
AtSEX1_cDNA	TT	AA	CT	TT	GA	AC	AT	CA	AA
AtNPQ1_cDNA									
AtMAX3_cDNA									
AtHY2_cDNA									
AtGUN4_cDNA									
AtTRY_cDNA									
		440		460		480		500	
AtLNG1_cDNA	CC	T	TT	AC	AG	ACT	CA	CT	CA
AtSEX1_cDNA	CA	AG	AT	TGG	AG	AT	CA	AA	AC
AtNPQ1_cDNA	TT	T	GC	TT	AA	TA	TC	TT	CT
AtMAX3_cDNA	CA	T	CC	T	GC	AG	T	CC	AG
AtHY2_cDNA	TT	CA	G	TT	GT	G	AG	T	C
AtGUN4_cDNA	TT	CC	CT	CA	AA	CA	AC	CC	CA
AtTRY_cDNA	TT	CG	CT	GA	T	AA	AC	TC	CA
		500		520		540		560	
AtLNG1_cDNA	-	AAAA	AG	AT	CA	T	AT	TT	T
AtSEX1_cDNA	GG	AG	GA	AG	AC	CT	CT	CA	AT
AtNPQ1_cDNA									
AtMAX3_cDNA									
AtHY2_cDNA									
AtGUN4_cDNA									
AtTRY_cDNA									
		580		600		620		640	
AtLNG1_cDNA	AC	ATA	CAC	AG	AG	AA	AC	T	AA
AtSEX1_cDNA	GT	CT	T	G	AC	GG	AG	AT	AA
AtNPQ1_cDNA	TT								
AtMAX3_cDNA	AT	CG	A	AC	CG	G			
AtHY2_cDNA	A								
AtGUN4_cDNA	TC								
AtTRY_cDNA	A								
		640		660		680		700	
AtLNG1_cDNA	AG	CT	T	T	AC	CT	GT	CT	CT
AtSEX1_cDNA	AG	CT	T	T	AC	AG	GA	AG	AA
AtNPQ1_cDNA									
AtMAX3_cDNA									
AtHY2_cDNA									
AtGUN4_cDNA									
AtTRY_cDNA									

AtLNG1_cDNA	<b>TC</b> TTCTACTA	<b>CT</b> TCTCTGA	<b>GAC</b> CAAAAC	<b>AG</b> AGGAGATA	<b>AC</b> AGAGTGG	<b>GA</b> ---	<b>T</b> TT	TCAAGAA <b>T</b> TG	471
AtSEX1_cDNA	C <b>TT</b> CTCGCT	<b>CT</b> CCGGATAG	<b>AA</b> CTCAAAAC	<b>T</b> TCAAGAAC	<b>GT</b> GCGCTAG	<b>AA</b> CTCCATTT	<b>GT</b> GAAA <b>CC</b> GG	766	
AtNPQ1_cDNA	C <b>A</b> CA <b>T</b> GT <b>TT</b>	<b>CAC</b> T	<b>---</b> CA <b>CC</b> ---	<b>TT</b> CA <b>T</b> AG <b>CC</b>	<b>GT</b> A	<b>---</b> TT <b>CG</b> ATTT	<b>T</b> T <b>CA</b> AG <b>T</b> G	307	
AtMAX3_cDNA	<b>C</b> AT <b>A</b> CT <b>ACT</b> T	<b>AG</b> CGG <b>T</b> CGA	<b>GG</b> ACT <b>TA</b> T <b>T</b> ---	<b>AC</b> TG <b>AC</b> CG <b>CC</b>	<b>AT</b> GG <b>CT</b> CA <b>AC</b>	<b>GG</b> T <b>CA</b> T <b>CC</b> T	<b>T</b> T <b>AG</b> CG <b>CT</b> G	346	
AtHY2_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>T</b> CG <b>CA</b> AG <b>CC</b>	219	
AtGUN4_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>GC</b> CA <b>AA</b> <b>T</b> TG	255	
AtTRY_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	140	
AtLNG1_cDNA	<b>GT</b> A <b>T</b> CA <b>GA</b> A	<b>GA</b> AT <b>CT</b> T <b>AA</b> A	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	514	
AtSEX1_cDNA	<b>GT</b> GG <b>CA</b> AT <b>TC</b>	<b>TC</b> AC <b>CT</b> T <b>AAA</b>	<b>CT</b> AG <b>AG</b> AT <b>AG</b>	<b>AT</b> GA <b>T</b> CC <b>T</b> GC	<b>CA</b> TAC <b>AC</b> CG <b>CT</b>	<b>AT</b> TG <b>AG</b> T <b>T</b> CC	<b>TT</b> AT <b>AT</b> TT <b>GA</b>	836	
AtNPQ1_cDNA	<b>AT</b> GA <b>T</b> GG <b>T</b> A-	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>GT</b> AG <b>CG</b> TT <b>GG</b>	329	
AtMAX3_cDNA	<b>AC</b> GG <b>T</b> AT <b>TC</b> -	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>GT</b> CG <b>GT</b> TT <b>GA</b>	368	
AtHY2_cDNA	<b>GT</b> A <b>T</b> A <b>AG</b> A-	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	237	
AtGUN4_cDNA	<b>CC</b> GA <b>AA</b> CC <b>GC</b>	<b>GAC</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>CA</b> T <b>AT</b> T <b>GA</b>	277	
AtTRY_cDNA	<b>TG</b> GA <b>T</b> A <b>AC</b> AC	<b>TG</b> AC-	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	163	
AtLNG1_cDNA	<b>CA</b> AC <b>CT</b> T <b>CT</b> G	<b>A</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	860	
AtSEX1_cDNA	<b>CG</b> AA <b>AG</b> TC <b>GG</b>	<b>AA</b> CA <b>AA</b> T <b>GG</b> T	<b>AT</b> AA <b>AA</b> AT <b>AA</b>	<b>TG</b> GT <b>CA</b> GA <b>AT</b>	<b>TT</b> TC <b>AT</b> ATA <b>A</b>	<b>ACT</b> TAC <b>CA</b> AC	<b>AG</b> AG <b>AA</b> AG <b>AA</b>	549	
AtNPQ1_cDNA	<b>CA</b> TT	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	906	
AtMAX3_cDNA	<b>CA</b> TC	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	341	
AtHY2_cDNA	<b>CG</b> TT	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	380	
AtGUN4_cDNA	<b>CG</b> T <b>TC</b> T	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	247	
AtTRY_cDNA	<b>CG</b> T <b>C</b>	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	283	
AtLNG1_cDNA	<b>GT</b> AG <b>A</b> AG <b>A</b> AG	<b>AA</b> GA <b>T</b> ---	<b>GT</b> CG <b>CG</b> AA <b>AG</b> CT	<b>TT</b> T <b>CT</b> ATA <b>AC</b>	<b>TT</b> ---	<b>---</b> ---	<b>---</b> ---	607	
AtSEX1_cDNA	<b>GT</b> GA <b>AA</b> GA <b>AA</b>	<b>AT</b> GT <b>TT</b> CT <b>GT</b>	<b>TT</b> CT <b>GA</b> AG <b>AT</b>	<b>CT</b> TT <b>CA</b> CA <b>GA</b>	<b>TT</b> CA <b>AG</b> CA <b>TA</b>	<b>TT</b> CT <b>AG</b> AT <b>GG</b>	<b>GA</b> AC <b>GT</b> AA <b>AG</b>	976	
AtNPQ1_cDNA	<b>G</b> AG <b>GA</b> TC <b>AA</b> T	<b>GG</b> CA <b>CT</b> T <b>CT</b>	<b>TGG</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	383	
AtMAX3_cDNA	<b>CA</b> AA <b>CG</b> GA <b>AA</b>	<b>GG</b> CA <b>CT</b> T <b>CA</b>	<b>CGG</b> CG <b>AA</b> AG <b>TA</b>	<b>CGT</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	431	
AtHY2_cDNA	<b>G</b> AG <b>AA</b> AG <b>AA</b>	<b>AG</b> AT <b>TC</b> T <b>AC</b>	<b>TT</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	286	
AtGUN4_cDNA	<b>---</b> ---	<b>AG</b> CA <b>T</b> CT <b>GG</b> T	<b>CT</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	314	
AtTRY_cDNA	<b>GC</b> AA <b>CA</b> GA <b>AA</b>	<b>AT</b> CG <b>CC</b> CT <b>---</b>	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	202	
AtLNG1_cDNA	<b>CT</b> GA <b>A</b> T <b>AA</b> AC	<b>AGA</b> ---	<b>TT</b> GG <b>AT</b> GT <b>AT</b> G	<b>AA</b> TGG <b>AT</b> CT <b>T</b>	<b>TT</b> CA <b>GG</b> T <b>GT</b> T	<b>TT</b> AC <b>CG</b> ---	<b>---</b> ---	666	
AtSEX1_cDNA	<b>GT</b> AA <b>AA</b> CA <b>AA</b> T	<b>GT</b> AC <b>AA</b> CC <b>CT</b>	<b>G</b> AG <b>AA</b> AG <b>AG</b> A	<b>AG</b> GAG <b>AG</b> GT <b>A</b>	<b>TGA</b> AG <b>CC</b> GG <b>CC</b>	<b>CGG</b> AC <b>CG</b> AG <b>CC</b>	<b>TAC</b> GG <b>GG</b> AG <b>GA</b>	1046	
AtNPQ1_cDNA	<b>CC</b> AA <b>A</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	388	
AtMAX3_cDNA	<b>AG</b> A <b>AG</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	436	
AtHY2_cDNA	<b>GT</b> AT <b>A</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	291	
AtGUN4_cDNA	<b>CA</b> A <b>---</b>	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	317	
AtTRY_cDNA	<b>GA</b> A <b>---</b>	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	205	
AtLNG1_cDNA	<b>TT</b> CC <b>AC</b> CG <b>AG</b> A	<b>CG</b> T <b>GT</b> CA <b>CC</b> GG	<b>G</b> AG <b>AT</b> GA <b>CT</b>	<b>CA</b> AG <b>T</b> CT <b>CT</b> T	<b>CC</b> TT <b>CA</b> GG <b>CA</b>	<b>A</b> AG <b>CA</b> AG <b>TGA</b>	<b>CA</b> AT <b>G</b> ---	734	
AtSEX1_cDNA	<b>AA</b> T <b>AG</b> T <b>GC</b> GA	<b>GG</b> T <b>GC</b> T <b>CA</b> AG	<b>T</b> GG <b>AA</b> AG <b>AT</b> CT	<b>C</b> AG <b>AG</b> CA <b>AA</b> AG	<b>CT</b> GT <b>GA</b> AG <b>A</b>	<b>A</b> AG <b>AT</b> AA <b>CA</b> AG	<b>TT</b> AA <b>TG</b> AA <b>TC</b>	1116	
AtNPQ1_cDNA	<b>---</b> ---	<b>---</b> ---	<b>GT</b> GT <b>GA</b> T <b>AT</b> CT	<b>C</b> AG <b>AA</b> C <b>AA</b> C	<b>TGG</b> T <b>GG</b> GA <b>G</b> A	<b>TC</b> CT <b>CA</b> C	<b>---</b> ---	432	
AtMAX3_cDNA	<b>---</b> ---	<b>---</b> ---	<b>AG</b> CA <b>CG</b> AT <b>CC</b>	<b>TT</b> AA <b>CT</b> GA <b>C</b>	<b>AC</b> GT <b>GG</b> CG <b>GT</b>	<b>TC</b> AT <b>CA</b> AT <b>AG</b>	<b>AG</b> GT <b>CT</b> TT <b>CT</b>	486	
AtHY2_cDNA	<b>---</b> ---	<b>---</b> ---	<b>AG</b> GA <b>AT</b> T <b>CG</b>	<b>C</b> AG <b>AG</b> CT <b>CT</b> GC	<b>TT</b> TA <b>GA</b> AG <b>AA</b>	<b>ACC</b> AG <b>GA</b> AA <b>AA</b>	<b>G</b> AT <b>CG</b> TT <b>CT</b>	340	
AtGUN4_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	345	
AtTRY_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	233	
AtLNG1_cDNA	<b>GT</b> GA <b>T</b> AC <b>C</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	796	
AtSEX1_cDNA	<b>CC</b> AA <b>AA</b> T <b>CT</b> TA	<b>AT</b> GG <b>GA</b> CA <b>TC</b>	<b>AT</b> CC <b>AG</b> T <b>GG</b> A	<b>CG</b> GG <b>AG</b> GG <b>AA</b> A	<b>AG</b> AA <b>AA</b> AA <b>AG</b> T	<b>T</b> TC <b>CA</b> AG <b>CAA</b>	<b>CC</b> AG <b>AG</b> CG <b>TA</b>	1186	
AtNPQ1_cDNA	<b>T</b> CT <b>GC</b> AT <b>T</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	465	
AtMAX3_cDNA	<b>T</b> CG <b>GT</b> CT <b>T</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	531	
AtHY2_cDNA	<b>T</b> GA <b>AG</b> CT <b>T</b> CA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	369	
AtGUN4_cDNA	<b>TT</b> CA <b>GA</b> T <b>---</b>	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	368	
AtTRY_cDNA	<b>AC</b> AT <b>CA</b> CT <b>---</b>	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	252	
AtLNG1_cDNA	<b>A</b> AG <b>GA</b> GA <b>---</b>	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	842	
AtSEX1_cDNA	<b>AA</b> AA <b>AA</b> AA <b>TT</b> A	<b>T</b> AA <b>CA</b> CT <b>GA</b> C	<b>A</b> AG <b>AT</b> CC <b>AG</b> C	<b>GC</b> AA <b>GG</b> GA <b>AG</b>	<b>T</b> AT <b>CC</b> T <b>---</b> CT	<b>G</b> AA <b>---</b> TC <b>GT</b> CC	<b>T</b> CG <b>AG</b> GT <b>TGT</b>	1256	
AtNPQ1_cDNA	<b>T</b> TT <b>GA</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	473	
AtMAX3_cDNA	<b>AA</b> AA <b>AA</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	539	
AtHY2_cDNA	<b>CT</b> AG <b>---</b>	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	373	
AtGUN4_cDNA	<b>GT</b> GA <b>AA</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	374	
AtTRY_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	252	
AtLNG1_cDNA	<b>CG</b> TT <b>TCT</b> T <b>C</b>	<b>AT</b> C <b>---</b> ACC <b>AT</b>	<b>GC</b> T <b>CC</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	888	
AtSEX1_cDNA	<b>TG</b> CT <b>GA</b> T <b>TT</b>	<b>GT</b> T <b>GA</b> ACC <b>AG</b>	<b>AA</b> T <b>C</b> CA <b>AA</b> T <b>C</b>	<b>CT</b> CA <b>T</b> CT <b>GA</b> A	<b>TC</b> GAG <b>CT</b> T <b>CT</b>	<b>CA</b> ---	<b>---</b> ---	1326	
AtNPQ1_cDNA	<b>TG</b> ---	<b>TG</b> CA <b>CT</b>	<b>A</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	483	
AtMAX3_cDNA	<b>GG</b> CT <b>ATA</b> CT	<b>A</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	550	
AtHY2_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	373	
AtGUN4_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	374	
AtTRY_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	252	
AtLNG1_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	918	
AtSEX1_cDNA	<b>GC</b> CA <b>AA</b> AG <b>CA</b> A	<b>AG</b> GAG <b>GA</b> AG <b>A</b>	<b>AG</b> AA <b>ACC</b> AC <b>T</b>	<b>CC</b> AG <b>T</b> CT <b>TT</b> A	<b>GC</b> ACC <b>AC</b> GG <b>C</b>	<b>TT</b> CT <b>CA</b> GT <b>TT</b>	<b>G</b> AA <b>---</b> CA <b>GG</b> CC	1396	
AtNPQ1_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	498	
AtMAX3_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	565	
AtHY2_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	387	
AtGUN4_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	374	
AtTRY_cDNA	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	<b>---</b> ---	252	

		1.420		1.440		1.460	
AtLNG1_cDNA	<b>CGGTTTGAGT</b>		<b>AATGGTGAG</b>	<b>AATCC</b>		<b>TG</b>	<b>T AAGAGA ACC</b>
AtSEX1_cDNA	<b>CGATTITGGT</b>	<b>GTTTGTACT</b>	<b>AAACTTCCG</b>	<b>GAAAAGACGAA</b>	<b>AAITCAITGT</b>	<b>GCAACIGATT</b>	<b>TAAAGAGGCC</b>
AtNPQ1_cDNA							<b>TGAAAGAGCT</b>
AtMAX3_cDNA							<b>TGGG</b>
AtHY2_cDNA							
AtGUN4_cDNA							
AtTRY_cDNA							
		1.480		1.500		1.520	
AtLNG1_cDNA	<b>GAC</b>	<b>CAATGGG</b>	<b>TCGCCAAG</b>	<b>GTGGGCGCGT</b>	<b>TTAATGATGC</b>	<b>CAAGT</b>	<b>TATAAGGGA</b>
AtSEX1_cDNA	<b>GGTTACCCCTT</b>	<b>CACITGGGCTT</b>	<b>TGTCTCAAAA</b>	<b>GGGTGGAGAA</b>	<b>TGGTTGGACC</b>	<b>CACCTTCAGA</b>	<b>TATACTGCCA</b>
AtNPQ1_cDNA	<b>GACC</b>						
AtMAX3_cDNA	<b>GATT</b>						
AtHY2_cDNA							
AtGUN4_cDNA							
AtTRY_cDNA							
		1.560		1.580		1.600	
AtLNG1_cDNA		<b>GCTTGTGAG</b>	<b>AAGCTCTAT</b>	<b>CATAAGGAGA</b>	<b>CAAGAACCAG</b>	<b>AGATGAAGAA</b>	<b>GCCTTGTCTC</b>
AtSEX1_cDNA	<b>CCAAAACCTCTT</b>	<b>TGCCAGTAGC</b>	<b>TGGTGTCTGT</b>	<b>GATACAAAAC</b>	<b>TGACCATCAC</b>	<b>T - TCAACAG</b>	<b>ATCTTCCTAG</b>
AtNPQ1_cDNA			<b>GCTCCGGT</b>	<b>GTTGCTAAA</b>	<b>CTCGTGGGTG</b>		
AtMAX3_cDNA			<b>GCTTTTGT</b>	<b>TATGGGAAGC</b>	<b>TGGTGAACCG</b>		
AtHY2_cDNA				<b>ATGTTAAGA</b>	<b>CCG</b>		
AtGUN4_cDNA							
AtTRY_cDNA							
		1.620		1.640		1.660	
AtLNG1_cDNA	<b>AGCAGCCTAA</b>	<b>AFC</b>	<b>AGC</b>	<b>CAGAGCTAA</b>	<b>GTGTCCTTC</b>	<b>T - CAAAGAAT</b>	<b>CATCACCATC</b>
AtSEX1_cDNA	<b>TCCGGTTCAA</b>	<b>ACTTTT</b>	<b>GAGC</b>	<b>TGGAAATAGA</b>	<b>AGGTGACAGC</b>	<b>TACAAGGCA</b>	<b>TGCCGTTTGT</b>
AtNPQ1_cDNA						<b>TITTAGCTTG</b>	<b>CGCGTTCCTT</b>
AtMAX3_cDNA						<b>TACGAGATTG</b>	<b>AATCTGGATC</b>
AtHY2_cDNA						<b>- - AAGTTCA</b>	<b>AATGCTTGGT</b>
AtGUN4_cDNA						<b>- CGTGGCTA</b>	<b>CGTITTTCTC</b>
AtTRY_cDNA						<b>- - AGATCT</b>	<b>CATCTT</b>
		1.700		1.720		1.740	
AtLNG1_cDNA	<b>AATGAATGG</b>		<b>AGTGAGGG</b>		<b>A</b>	<b>CGGAGAGTAG</b>	<b>TGAAGCTGAA</b>
AtSEX1_cDNA	<b>GGTGAAGGT</b>	<b>GGATTAAAA</b>	<b>TAATGACAGT</b>	<b>GACTTTTATG</b>		<b>TGGACTTTGC</b>	<b>TAAAAGAAGAA</b>
AtNPQ1_cDNA	<b>ATCTGCAGAT</b>						<b>AAACATGTC</b>
AtMAX3_cDNA	<b>GTCCGAAGAT</b>						<b>CAGT</b>
AtHY2_cDNA							<b>TAACGTCGAG</b>
AtGUN4_cDNA							<b>- - - CAAA</b>
AtTRY_cDNA							<b>GAATAGACTC</b>
		1.760		1.780		1.800	
AtLNG1_cDNA	<b>CG - GTTCT</b>	<b>TIACGATGAG</b>	<b>AGGGAGACGA</b>	<b>GAAAAG</b>		<b>ACAGG</b>	<b>GGCCAAGTT</b>
AtSEX1_cDNA	<b>AGAAAGGATTA</b>	<b>TGCCGATGGA</b>	<b>AAGGGTACAG</b>	<b>CCAAAGCAIT</b>		<b>ACITGGACAAA</b>	<b>ATCGCAGAT</b>
AtNPQ1_cDNA	<b>TTTAAACTTG</b>	<b>TGC - ATGC</b>					<b>TGGAGAGTGA</b>
AtMAX3_cDNA	<b>GTGAATGTTG</b>	<b>TGATGATGA</b>					
AtHY2_cDNA	<b>TTGAGGAGTA</b>	<b>TGGCAATAGA</b>	<b>GA</b>				
AtGUN4_cDNA	<b>CCCGAAGATC</b>						
AtTRY_cDNA							
		1.840		1.860		1.880	
AtLNG1_cDNA	<b>GACCCCGAGG</b>	<b>TTGTC</b>	<b>ATTAGA</b>	<b>CAGTAGATCG</b>	<b>AATTCCTTTA</b>	<b>GGAGCGCAAG</b>	<b>ATCTAGTGT</b>
AtSEX1_cDNA	<b>GGCCAGAGAG</b>	<b>TCTTTCATGC</b>	<b>ATCGATTCAA</b>	<b>CATTGCAGCA</b>	<b>GATCTTGTGG</b>	<b>ACGAGGCCAAA</b>	<b>AAGTGCITGGT</b>
AtNPQ1_cDNA							
AtMAX3_cDNA							
AtHY2_cDNA							
AtGUN4_cDNA							
AtTRY_cDNA							
		1.900		1.920		1.940	
AtLNG1_cDNA	<b>TCACCAGAGC</b>	<b>CACAAGAGGT</b>	<b>TGTACAGGT</b>	<b>CACAGAAGAA</b>	<b>CAACATCAAG</b>	<b>CGTCCGTTGCA</b>	<b>AAACTGATGG</b>
AtSEX1_cDNA	<b>CAACTGGGCT</b>	<b>TTGCAGGGAT</b>	<b>CCTAGTCTGG</b>	<b>ATGAGGTTTA</b>	<b>TGGCTACAAG</b>	<b>ACAGCTTGTG</b>	<b>TGGAACAAAA</b>
AtNPQ1_cDNA						<b>TTATTG</b>	
AtMAX3_cDNA						<b>TGATCTT</b>	<b>CCGACAGAGA</b>
AtHY2_cDNA							
AtGUN4_cDNA							
AtTRY_cDNA							
		1.980		2.000		2.020	
AtLNG1_cDNA	<b>GTCTTGAAGT</b>	<b>AATTCAGAT</b>	<b>GAGCCTGTGA</b>	<b>CCATTGAGAA</b>	<b>TAGAGAAAAT</b>	<b>GGC - TICTGC</b>	<b>GACTCCCCGA</b>
AtSEX1_cDNA	<b>ACTATAATGT</b>	<b>TAGGCCAAGC</b>	<b>GAGATAAGCA</b>	<b>AAGCGCAGGA</b>	<b>TAGACTGACT</b>	<b>GACCTTCTC</b>	<b>AGGACGTTTA</b>
AtNPQ1_cDNA			<b>GGGAT</b>	<b>CAG</b>	<b>- - - GATAGAA</b>	<b>CTCG</b>	<b>AAAGTGCATT</b>
AtMAX3_cDNA	<b>TTTACTGGT</b>	<b>CATGATAT</b>	<b>GGGAC</b>	<b>A</b>	<b>CAGCGCAGAA</b>	<b>TTTGTGAAA</b>	<b>CCCATACTTC</b>
AtHY2_cDNA			<b>GAGA</b>				<b>AAATGCAGTTC</b>
AtGUN4_cDNA							
AtTRY_cDNA							<b>CGAATG</b>
		2.040		2.060		2.080	
AtLNG1_cDNA	<b>GGCCAACTTC</b>	<b>CCGAGTGGAA</b>	<b>GTAGATCTAC</b>	<b>AAAGATCAAG</b>	<b>AGGTTTGTAT</b>	<b>TCAATCAAAA</b>	<b>AGATGATC</b>
AtSEX1_cDNA	<b>TGCAAGTTAT</b>	<b>CCAGAGTAGA</b>	<b>GAGAACTTTT</b>	<b>GCGGATGATA</b>	<b>ATGTCITACTG</b>	<b>TAGGTCGAGG</b>	<b>AGGTGAAGGA</b>
AtNPQ1_cDNA	<b>GCCAACTCTG</b>	<b>CTG - - - T</b>	<b>GCAAGCCAA</b>	<b>TCCGCT</b>	<b>- - - GCCTCAG</b>	<b>ACCTGCAATA</b>	<b>ACCC</b>
AtMAX3_cDNA	<b>TAAGATGCCA</b>	<b>CCGA - - - A</b>	<b>ACGGTTCTTG</b>	<b>TCAGATTACA</b>	<b>AAAGTGCACGG</b>	<b>TCGAAGAAAA</b>	<b>AGAC</b>
AtHY2_cDNA	<b>TTTGACTTTG</b>	<b>CGGGTTTQAT</b>	<b>GGAGCCTGAG</b>	<b>TATGATACTC</b>	<b>CCATATCTTG</b>	<b>T - - - - -</b>	<b>- - - - -</b>
AtGUN4_cDNA	<b>- - TCAAGCTA</b>	<b>TGCACAACTG</b>	<b>ATGGATTAAA</b>	<b>CACAGTGATG</b>	<b>GTAGATTCGG</b>	<b>- - - - -</b>	<b>- - - - -</b>
AtTRY_cDNA	<b>TACAGACTTG</b>	<b>TCCGTTGATG</b>	<b>GTGGGATTTG</b>	<b>ATAGCAGGAA</b>	<b>GAGTTCCTGG</b>	<b>- - - - -</b>	<b>- - - - -</b>

AtLNG1_cDNA		2.120		2.140		2.160		1543
AtSEX1_cDNA	CAATGTCGGG	AACGAAATCCG	TGCTAAGT TT	CCTAT		GAAAG	CATCTCATTG	GGGCAAGTT
AtNPQ1_cDNA	---	---	TGACGAAATTT	CTAGTCAATCC	AGCGGAAAAA	---	TGACTGCAAG	GGTGGAAATT
AtMAX3_cDNA	---	---	---	CAGAT	---	GAAAC	CGAGTGCAG	AATGAAGCT
AthY2_cDNA	---	---	---	TAAAC	---	GGT	CACITGCAAC	GCTGAAGAT
AtGUN4_cDNA	---	---	GCTAACHTT	TTCA	---	---	CATCTACCAFA	GTTAAACATA
AtTRY_cDNA	---	---	---	---	---	ATAC	AGCGTGCAC	GAAAAATCT
AtLNG1_cDNA	2.180		2.200		2.220		2.240	
AtSEX1_cDNA	---	GATG	GTGCCAAGAA	CCAAGTCAAA	ATACCAGAGC	CTACTAGC	---	CTGAC
AtNPQ1_cDNA	TGGAGGAATG	---	GCAITCAGAAG	TTGCATAACA	ACACTAGTCC	AGATGATGTT	GTCATCTGTC	AGGCATTTGAT
AtMAX3_cDNA	---	---	---	---	---	---	---	---
AthY2_cDNA	---	---	---	---	---	---	---	GG
AtGUN4_cDNA	---	---	---	---	---	---	---	AT
AtTRY_cDNA	---	---	---	---	---	---	---	GT
AtLNG1_cDNA		2.260		2.280		2.300		
AtSEX1_cDNA	GAGATA	AGAAAGCCGCT	TTACA-GCT	TGAGTTCAAA	AAGTCCGAGA	AAGACCTCAG	GGTCTTAAAG	1666
AtNPQ1_cDNA	GGATTATATC	AAAAGTGACT	TTGACTTAAAG	TGTTTACTGG	AAGACCTTGA	ACGATAATGG	CATTAACCAA	2304
AtMAX3_cDNA	GGATTCTGTTT	GAGAACAGTG	TTG--TTGA	TGAGTTCAAC	GAGT	---	GTGCTGTG	TGGAGAAAA
AthY2_cDNA	GCTTTTACCT	CGAAGCAACT	TCACATTTTG	TGAGTATGAT	TCCG	---	AATTC AAG	TTCATACAAA
AtGUN4_cDNA	GATTATGGACC	TAAATC	CT	TTGATCAGT	TGACT	---	---	GACCAGA
AtTRY_cDNA	GGTTAAAAAGT	GAGAAAGAT	TTG	---	---	---	---	A
AtLNG1_cDNA		2.320		2.340		2.360		2.380
AtSEX1_cDNA	CAAACTCTC	AAGCAATGGA	GAGAGCGCAG	CAGTTCATA	GCAAAAGAT	---	GATGATGAC	AACAAAACTC
AtNPQ1_cDNA	GAGCGAGTCT	TAACLTAT	GATCGTGCA	TACATCTGA	ACCAAAATTTT	AGAGGAGAAC	AAAAGACCG	2372
AtMAX3_cDNA	AGTGTGTTC	TAGAAAATCT	GATCTCGGAG	AATTTCTGTC	CCCAACCCCT	---	---	843
AthY2_cDNA	CGAAAGAAAT	CAAGATCGAT	GATCATAATGA	TGATTTCATGA	TTGGGGATTC	---	---	969
AtGUN4_cDNA	CGGATTACCA	AGACAATAT	TATAACAAGA	TAACTCCAT	ATATCAC	---	---	653
AtTRY_cDNA	CAAGATTTCT	CGTTAAAGT	GACTGGATGA	AGCTTCTTGA	---	---	---	559
AtLNG1_cDNA		2.400		2.420		2.440		
AtSEX1_cDNA	TATGTTCAAG	CAATTTTATG	CA	GA	GAAAATAATCA	GCCAAATCCA	TCTGCAATAA	ACACCTCGTC
AtNPQ1_cDNA	TCT	TTTGGC	TGATCTTGGG	CACATACATGA	GGAGTTLTAA	GGCTTTCAT	TCAGGGGCAG	ACCTTGAGTC
AtMAX3_cDNA	---	---	---	---	---	---	---	---
AthY2_cDNA	---	---	---	---	---	---	---	---
AtGUN4_cDNA	---	---	---	---	---	---	---	---
AtTRY_cDNA	---	---	---	---	---	---	---	---
AtLNG1_cDNA		2.460		2.480		2.500		2.520
AtSEX1_cDNA	CAITGAATTTI	AAAT-CAATC	TCTATCTGTG	TIAITGAAAGC	AGCTACCGCT	CCAGTCTTCA	AAGA	1860
AtNPQ1_cDNA	GGCTATACAA	AATTCATTTGG	GCTACCAAGA	TGACGGTCAA	GGTTTCATGG	TTGGGGTGCA	GATAAA	2511
AtMAX3_cDNA	GGAAGTTGGTA	CATTACA	---	AG	TGGCTTGAAT	CCAAACTTTG	ATGCCITCGA	C
AthY2_cDNA	CGAATAGTTTC	CATAGCGGCT	ATGTCGGGA	TGTACCAAT	GGTATCAGCG	TTATCGTAA	A	1076
AtGUN4_cDNA	GGTGAATCCA	TAAAGT	---	---	GTTTGGTAGG	TTTTCGTTCA	GCAAGAAAA	757
AtTRY_cDNA	---	---	---	---	CAATTACAGA	GCGTTTCCCTG	ACGAAITCAA	G
AtLNG1_cDNA		2.540		2.560		2.580		
AtSEX1_cDNA	CAATGAT	AGGAGT	CT	TTGTTCTCTG	CGTTCCTAG	GTACTATCAG	GATGACAA	816
AtNPQ1_cDNA	---	---	---	---	---	---	---	---
AtMAX3_cDNA	---	---	---	---	---	---	---	---
AthY2_cDNA	---	---	---	---	---	---	---	---
AtGUN4_cDNA	---	---	---	---	---	---	---	---
AtTRY_cDNA	---	---	---	---	---	---	---	---
AtLNG1_cDNA		2.600		2.620		2.640		2.660
AtSEX1_cDNA	CCTGAGGCAA	GCCGAGAAAG	TCATCCG	AGGAGCAGA	GTGCTATGGA	TGTGAC-CC	GAGGCCA	1993
AtNPQ1_cDNA	TGTAGAGCCA	CTTCTTGAGG	GTTTGCTTGA	AGCTGTCFA	GAGCTAAGGC	CACTTCTGCT	GAGTTCCTAT	2649
AtMAX3_cDNA	---	---	---	---	---	---	---	---
AthY2_cDNA	---	---	---	---	---	---	---	---
AtGUN4_cDNA	---	---	---	---	---	---	---	---
AtTRY_cDNA	---	---	---	---	---	---	---	---
AtLNG1_cDNA		2.680		2.700		2.720		
AtSEX1_cDNA	GGATATTACA	AGGGCCAGAC	A	GAA	TCCACAATGA	AAAACACTAG	TACCAGACCA	TTACAATCGA
AtNPQ1_cDNA	GACCGCTCA	AGGATCTGT	ATCTTTGGAC	CTCGGTCTTG	---	---	---	---
AtMAX3_cDNA	AGCCGTACA	AAAAT	---	---	---	---	---	---
AthY2_cDNA	---	---	---	---	---	---	---	---
AtGUN4_cDNA	---	---	---	---	---	---	---	---
AtTRY_cDNA	---	---	---	---	---	---	---	---
AtLNG1_cDNA		2.740		2.760		2.780		2.800
AtSEX1_cDNA	AAAGCGACAT	GGCCAAGTCA	GGG	AG	ATCCAGAAGC	CTAGTGT-CA	GCCTAAGAAC	ACCACCAAG
AtNPQ1_cDNA	AAGAGGATAT	GAGCAATTGA	ATGATGCTGG	ACCTGAGAAA	ATCATGTAAT	TCATCAGGCT	AGTCTTTGAA	2784
AtMAX3_cDNA	---	---	---	---	---	---	---	---
AthY2_cDNA	---	---	---	---	---	---	---	---
AtGUN4_cDNA	---	---	---	---	---	---	---	---
AtTRY_cDNA	---	---	---	---	---	---	---	---

AtLNG1_cDNA	AAGCTTGGG	---	TTTCGAG	AAGCAGTCTC	GGCCA--AC	ATCCCCAAAA	---	CCAG	2168	
AtSEX1_cDNA	AATCTTGGCC	TCCTCTCAGA	TGACAAAGAA	GACCTTATAT	ACTGCTTGAA	GGGATGGCAA	TTTGGCCCTCG		2854	
AtNPQ1_cDNA	ACCTT								1101	
AtMAX3_cDNA	A	TTT							1235	
AtHY2_cDNA	A								887	
AtGUN4_cDNA									638	
AtTRY_cDNA									440	
AtLNG1_cDNA	AACCTGACAA	GAACCAAGAGA	CAACA--A	CTCAGTAGGC	AAACA--	GACAGAG	TCAGCCT	C	2223	
AtSEX1_cDNA	ACATGTGCAA	GAGCAAAA	GATCACTGGG	CTCTGTATGC	AAAACTGTGT	CTTGACAGAA	GCCGACTAGC		2924	
AtNPQ1_cDNA		CAC	TATCAAGA			TGACTGGT	ATATCCTTC		1130	
AtMAX3_cDNA		AAA	GATTCAGA			TACAAGCT	TCGGCTTGT		1264	
AtHY2_cDNA						TGGCAGC	ACAAAAGGAT		905	
AtGUN4_cDNA							CACTTAGC		646	
AtTRY_cDNA							TCTATCTATC		452	
AtLNG1_cDNA	CCCGAAAGA	AAGCCAGGGA	-----TAA	AATTCGTGG	CCTACAGCAA	-----	TCCTG		2270	
AtSEX1_cDNA	ACTGCAAGC	AAAAGCTGAGA	GGTACCTTGA	AATTCGTCAA	CCATCGGCTG	AATATCTTGG	ATCTTGTCTT		2994	
AtNPQ1_cDNA	ATCAAAGATA	GAGAAATAAA					CTCTG		1153	
AtMAX3_cDNA	CTTACCGATG	GT--TCGA					TTTC		1284	
AtHY2_cDNA	CCTGAGATG	G-					CTTCTTAA		925	
AtGUN4_cDNA	GCTCACAAAC	G-							657	
AtTRY_cDNA	CTTCCCTAGTG								462	
AtLNG1_cDNA	AAGA	CCGTTT	AAGTGA--T	GAAAGCAGTGC	ACTTGAGAAG	TC-----T	AAGATCTGAC	AGCAACGTTAA	2330	
AtSEX1_cDNA	GGAGTCGATC	AGTCGGCTGT	TAGTATATTT	ACTGAAAGAGA	TCATTCGAGC	TGGATCTG	C	AGCAGCATTG	3063	
AtNPQ1_cDNA	AAGACTATAT	ATTTGTAT							1171	
AtMAX3_cDNA	CAGA--AAAT	GTTTG							1297	
AtHY2_cDNA	AAGATTA--								932	
AtGUN4_cDNA									657	
AtTRY_cDNA									462	
AtLNG1_cDNA			GCT	TGGCCT		CTAACCT	TGATACTG	AGGTTACAA	2363	
AtSEX1_cDNA	TCGTCACTTG	TTAACCAGCT	TGACCCAGTT	CTTAGGAAGA	CTGCTAAGCTT	GGGAAGTTGG	CAGGTTATTA		3133	
AtNPQ1_cDNA									1171	
AtMAX3_cDNA									1297	
AtHY2_cDNA									932	
AtGUN4_cDNA									657	
AtTRY_cDNA									462	
AtLNG1_cDNA	GC--	GGT--	ATAA	CTATGAGAGG	AACAGCGACA	TTACGGAGCA	GCAACCCCG		2413	
AtSEX1_cDNA	GTCCGTGAGA	GGTCGTCGGA	TATGTCATTG	TTGTGGACGA	ATTCCTCACT	GTACAGAATA	AAACTACCA		3203	
AtNPQ1_cDNA			ACCA	CCGTGGCGCA	AACCA				1191	
AtMAX3_cDNA			GCTA	TGATTTGGCAA	AGCAA				1317	
AtHY2_cDNA				GTAGGTGA	AGCAA				945	
AtGUN4_cDNA				CTTTGAGAGC	AACGC				672	
AtTRY_cDNA									462	
AtLNG1_cDNA			AAACAAAG	GAGTCCAGAC	TTGGGAATGA	GTCGCTGTC			2451	
AtSEX1_cDNA	TAGACCTACA	ATTATAGTTG	CAAAACAGAGT	GAGAGGAGAG	GAGGAAATCC	CTGATGGTGC	AGTTGCCGTA		3273	
AtNPQ1_cDNA						GCTT	GGGATGGATA	TGGTGGTGC	1214	
AtMAX3_cDNA						AAGC	TGGATCTTTC	TGTATGAAT	1341	
AtHY2_cDNA							AGCCAAAGG	AGCTGCTA	962	
AtGUN4_cDNA									672	
AtTRY_cDNA									462	
AtLNG1_cDNA	AAAACCTCTC	AAA		GTACAG	T		GG	AGCAGCCAG	2484	
AtSEX1_cDNA	CTGACACCTG	ACATGCCGGA	TGACTATCT	CAATGTTCTG	TTTCGAGCAAG	AAATGGAAAG	ATCTGCTTTG		3343	
AtNPQ1_cDNA		AGTTGTGA							1221	
AtMAX3_cDNA	CTAAACCGTG								1351	
AtHY2_cDNA									962	
AtGUN4_cDNA									672	
AtTRY_cDNA									462	
AtLNG1_cDNA	CCCGGTGTC	---	AGT	TCTTGATGTA	GCTTTCGAGC	AA--GATGAT	TCACCAATCC	CTGTGCGGAA	2544	
AtSEX1_cDNA	CCACAATGTT	TGATTCGGT	AICTTATCTG	ACCTGCAAGG	---	ACACGAGAAG	TTCTGTATT	ACCCAATAGC	3413	
AtNPQ1_cDNA						CGACGACAAA	CTACTCCCTC	ATCTAGTTAA	1251	
AtMAX3_cDNA							TTCTCTGTCA	AT	1382	
AtHY2_cDNA									980	
AtGUN4_cDNA									672	
AtTRY_cDNA									462	
AtLNG1_cDNA	GATA	TCCA	---	TTGTCT	TTAAAGAGGA	CGACAAT	---	CTAAGTTC	TGA	2586
AtSEX1_cDNA	AACCTCTGCA	GATGTAGTCT	ATAAAGAGGT	AAACGATAGT	GAGCTTTCGA	GTCCAAGTTC	AGAGAACCTG		3483	
AtNPQ1_cDNA	ATTATACCAG	AACTCGAA	---	AAAG	CAGCAAAA				1281	
AtMAX3_cDNA	GGTGTCTATG	ACTTTGGACT	CTACCGAAA		CTGCAATA				1420	
AtHY2_cDNA									980	
AtGUN4_cDNA									672	
AtTRY_cDNA									462	

AtLNG1_cDNA	- - - AGAGTCCC	AT TGGG	- - - - - TGAAC	AAGAAACAACA	ACTTATGTAG	ATCGATTGTG	TGGCCTGAGA	2645
AtSEX1_cDNA	G AAGATGCC	CTCCAAGTAT	T TCTTTGGTC	AAGAAACAGT	T TCGGGGTAG	ATATGCTATA	T CATCTGAGG	3553
AtNPQ1_cDNA	-----	-----	-----	-----	-----	-----	-----	1281
AtMAX3_cDNA	-----	-----	-----	-----	-----	-----	-----	1420
AtHY2_cDNA	-----	-----	-----	-----	-----	-----	-----	980
AtGUN4_cDNA	-----	-----	-----	-----	-----	-----	-----	672
AtTRY_cDNA	-----	-----	-----	-----	-----	-----	-----	462
AtLNG1_cDNA	G T A A C A C G A G	T - - - - -	- - - - - C T A A A G	C A A C C T G A T G	G T G A C T T A C	G G A G G G - - - -	- - - - - T T T C A T	2694
AtSEX1_cDNA	A G T T C A C A A G	T G A C T T G G T T	G G T G C T A A A T	C A A G A - A A T A	T C G G G T A T C T	G A A A G G A A A A	G T T C C T T C T T	3622
AtNPQ1_cDNA	-----	-----	-----	- A G C A T A G - G	C A G A G A C T T C	A G C A C A - - - -	-----	1305
AtMAX3_cDNA	-----	-----	-----	- G T T G T G A T G	T A G A G C C T C T	A A A C G G - - - -	-----	1445
AtHY2_cDNA	-----	-----	-----	- - - - - G G G G	T G G A T C A G T T	A G G - - - - -	-----	997
AtGUN4_cDNA	-----	-----	-----	- - - - -	- - - A G C T T C T	G A A - - - - -	-----	682
AtTRY_cDNA	-----	-----	-----	- - - - -	- - - - -	- - - - -	-----	462
AtLNG1_cDNA	G G A A G A C G A T	G C C G A A T T C A	A A A T G G T G A	C C A C A A G T A C	A T T C A G A - G	A T A A T G T T G G	C A - - - - -	2755
AtSEX1_cDNA	G G G T T G G T A T	C C C A A C T T C A	G T T G C G T T G C	C A T T T G G T G T	T T T T G A G A A G	G T T A T C T C C G	A A A A G G C G A A	3692
AtNPQ1_cDNA	-----	- T T C A	T T A G A A C C G A	T A A C A C A T G T	G G T C C T G A A -	-----	-----	1338
AtMAX3_cDNA	-----	- G T G G	A A C A A G C C G T	C A G A T T T T C C	G G T T A T A A A -	-----	-----	1478
AtHY2_cDNA	-----	- - - C A	C A A A A A C A T T	C A T T G A T T A C	T T T C A G A - -	-----	-----	1027
AtGUN4_cDNA	-----	- - - A	T G C G T T T T A A	G C C A T C C T G C	G T T T G G A - -	-----	-----	711
AtTRY_cDNA	-----	- - - -	- - - - -	- - - T T T T T G T	T T T T A A G - -	-----	-----	476
AtLNG1_cDNA	T C A G G G C T T C	T A C G A G A - - -	- - - - - T A T C	G A C T A C A G C -	- - - A T G A T A	A G C A T C C A G C	T G C A C C - A A G	2810
AtSEX1_cDNA	T C A G G C G G T G	A A C G A T A A A T	T G C T A G T A T T	G A G A A A A C T	C T T G A T G A G G	G A G A C C A A G G	T G C T C T G A A G	3762
AtNPQ1_cDNA	-----	-----	-----	-----	-----	-----	-----	1338
AtMAX3_cDNA	-----	-----	-----	-----	-----	-----	-----	1478
AtHY2_cDNA	-----	-----	-----	-----	-----	-----	-----	1027
AtGUN4_cDNA	-----	-----	-----	-----	-----	-----	-----	711
AtTRY_cDNA	-----	-----	-----	-----	-----	-----	-----	476
AtLNG1_cDNA	C A C A C T A C C	G A T C A A - - - -	- - - - - C C C G A	G C C T T T C T T	T G T A C T G G A A	C A G A A C A A G A	A G T A C T A T G A	2861
AtSEX1_cDNA	G A A A T C C G G C	A G A C A C T G T T	G G G G C T A G T T	G C A C C C C C A G	A A C T G G T T G A	A G A A C T G A A A	A G T A C T A T G A	3832
AtNPQ1_cDNA	-----	-----	-----	- C C T G	C G C T C G T G G -	- - - - - A	G A G A A T T G A G	1362
AtMAX3_cDNA	-----	-----	-----	- C T C A	T C C T G G T C C -	- - - - - G	G A A A A A A G A A	1502
AtHY2_cDNA	-----	-----	-----	- - - -	- - - - -	- - - - -	- G T A C C A A A	1035
AtGUN4_cDNA	-----	-----	-----	- - - -	- - - - -	- - - - -	- - - - - C A G	714
AtTRY_cDNA	-----	-----	-----	- - - -	- - - - -	- - - - -	- - - - -	476
AtLNG1_cDNA	C A A G C A A T G T	G A G T C T A C A G	- - - - -	A C A A C A A G C A	C A A A - G G C A G	A G G A T T T G G A	C A C A A C A A A A	2921
AtSEX1_cDNA	A A A G T T C T G A	C A T G C C A T G G	C C G G G T G A T G	A A G G T G A A C A	G A G A T G G G A G	C A A G C T T G G G	C A G C C A T A A A	3902
AtNPQ1_cDNA	A A G A C A T T G G	A A - - - G A A G	G T - - - - -	- - - G A A A G G A	T A A T C G T A A A	A G A G G T T G A A	G A G A T A G A A C	1417
AtMAX3_cDNA	C A A G T A C A T G	T A C T C T G C T G	C C - - - - -	- - - T C G T C G G	G A A C T G A A A G	T G A A C T T C C C	C A T T T C C A T T	1561
AtHY2_cDNA	C A G A A G A T G G	A A C T - - - - -	- - - - -	- - - G T A A G C G	A T A A A G G A A G	T A T C A T T G G G	A A G T C A T A - -	1084
AtGUN4_cDNA	C T G A T G A T A A	C A - - - - -	- - - - -	- - - - - C T G G A	G A A A C A G A A G	A C C A G C T T A A	C A G A G G T - - -	758
AtTRY_cDNA	- - - - -	- - - - -	- - - - -	- - - C A A C G A	A A A A A G A A A A	T - - - - -	- - - - -	494
AtLNG1_cDNA	C G G T G A A C C T	G G T T G A G A G A	A G T A A G A G G A	A G C T A T A T T	T G A C A C C A T C	A A C G A G A T C T	T A G C T C A C A -	2990
AtSEX1_cDNA	A A A G G T C T G G	G C T T C G A A A T	G G A A C G A G A G	A G C A T A C - T T	C A G C A G G A G G	A A A G T A A A A C	T G G A T C A T G A	3971
AtNPQ1_cDNA	A A G - - - - -	- - - A G G T A	G A G A A G G A A G	T G G A A A G G T T	C G G T A G G A C T	G A G A T G A A C T	T G T C C A G A -	1474
AtMAX3_cDNA	T C G - - - - -	- - - A C A T G	G T C G T G A A A T	T T G A C T T A G A	C T - C A A A C C T	C G T C C G T A C T	T G G T C T A C C -	1617
AtHY2_cDNA	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - T G A A A C	T G T C C A T G G	1100
AtGUN4_cDNA	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	758
AtTRY_cDNA	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	494
AtLNG1_cDNA	- - - - -	- - - - - G A T T	C G C T G C A G A A	G G - - - - -	G T G T A C A A A G	G A A C C A T C C A	T A A C A T T A T C	3036
AtSEX1_cDNA	C T A T C T C T G C	A T G G C T G T T T	T G C T C C A A A G A	A G T C A T C A A T	G C G G A T T A C G	G A T T C G T C A T	T C A C A C A A G T	4041
AtNPQ1_cDNA	-----	- - - - - G A T T	G G C T G A A G G A	-----	-----	-----	- - - - - T T	1490
AtMAX3_cDNA	-----	- - - - - G G -	A G C T A G A A G A	-----	-----	-----	- - - - - T T	1631
AtHY2_cDNA	-----	- - - - - G A T T	T A A G A G G A C A	-----	-----	-----	- - - - - A T T	1117
AtGUN4_cDNA	-----	- - - - - G T T C	C G G T G G C T A A	G G - - - - -	-----	-----	- - - - -	774
AtTRY_cDNA	-----	- - - - -	- - - - -	- - - - -	-----	-----	- - - - -	494
AtLNG1_cDNA	A A T C A G C A C G	C A A A G G A C A C	A C G A A A A A A G	T - - - - T C A A G A	G G G - - - - G A A G A	G C T T C T G C A A	A C T C T - - - -	3096
AtSEX1_cDNA	A A T C C A T C T T	C T G G A G A T T C	A T C A G A G A T T	T A T G C C G A G G	T G G T C A A A G G	C C T T G G G A A	A C T C T T G T A G	4111
AtNPQ1_cDNA	- - - T A A T G A A	C T G A A G C A A G	A C G A G G A G A A	-----	-----	-----	-----	1518
AtMAX3_cDNA	C G T T G G T G A G	C C C A T G T T T G	T C C C A A A A A A	C - - - -	-----	-----	-----	1662
AtHY2_cDNA	T A T C G G C T A A	C A A T G A T A T A	T G T G A A C A A G	T - - - -	-----	-----	-----	1148
AtGUN4_cDNA	- - - - - A A C A G G	C A G G A G T A G G	A G C A G A C A - -	- - - - -	-----	-----	-----	798
AtTRY_cDNA	- - - - -	- - - - -	- - - - -	- - - - -	-----	-----	-----	494
AtLNG1_cDNA	- - - - -	- - - - - G T G T T	C A G A G A T T G A	T C G A T T A C A A	G A T A A - - C T C	A A A G T G T A T C	T T G G A T G A G G	3149
AtSEX1_cDNA	G A G C A T A T C C	C G G T C G G T C T	C T G A G T T T C A	T C T G G A A G A A	A A A C A A C C T T	G A T T C G C C T C	T G G T G T T G G G	4181
AtNPQ1_cDNA	-----	-----	-----	T T C G T G A G A G	A G T T A - - - -	-----	-----	1533
AtMAX3_cDNA	-----	-----	-----	T C T G T T G A A G	A A G G A - - - -	-----	-----	1677
AtHY2_cDNA	-----	-----	-----	C A G A T T T C A G	A G T C A - - - -	-----	-----	1163
AtGUN4_cDNA	-----	-----	-----	- - - - -	- - - - -	-----	-----	798
AtTRY_cDNA	-----	-----	-----	- - - - -	- - - - -	-----	-----	494

		4.220		4.240		4.260	
AtLNG1_cDNA	ACGATGAAG-	ACCTCATTG	GG-	AGGATCTGCA	A-----A	GCCATGGCAT	GAACTGGAAG
AtSEX1_cDNA	CTACCCAAAG	AAACCCGATTG	GGCTGTTCAT	AAGAGGTTCA	ATCACTTCA	GATCTGATTTC	CAATGGAGAA
AtNPQ1_cDNA	-----	-----	-----	-----	-----	-----	-ACTAAAGAA
AtMAX3_cDNA	-----	-----	-----	-----	-----	-----	-GATGAAGAG
AtHY2_cDNA	-----	-----	-----	-----	-----	-----	-AACCAAGAG
AtGUN4_cDNA	-----	-----	-----	-----	-----	-----	- - - - -AAG
AtTRY_cDNA	-----	-----	-----	-----	-----	-----	- - - - -AAA
		4.280		4.300		4.320	
AtLNG1_cDNA	GAGATTGAAG	G-----	AGAGACACC	AGGGTTAGTC	T-----TACA	CATTGAGAGG	CTAATCTTCA
AtSEX1_cDNA	GATCTTGAAG	GTTATGCAAG	TGCAGGCCCTC	TACGACAGTG	TACCAATGGA	CGAGGAAGAC	CAAGTCGTGC
AtNPQ1_cDNA	GAGATGGAG	-----	-----	-----	-----	-----	CAAAATGAA
AtMAX3_cDNA	GACGATGGT	-----	-----	-----	-----	-----	- - - - -GAT
AtHY2_cDNA	GACGTCAAC	-----	-----	-----	-----	-----	- - - - -TACGAA
AtGUN4_cDNA	AGTGTTTAA	-----	-----	-----	-----	-----	- - - - -AA
AtTRY_cDNA	AATTATAA-	-----	-----	-----	-----	-----	- - - - -TAGATGT
		4.360		4.380		4.400	
AtLNG1_cDNA	AAGACTTGAT	TGGTGAAGTT	GTGACAAGCG	AGTTTGCAGC	TTTTCCAGAG	ATGCTCAGT-	GGGCAACC
AtSEX1_cDNA	TCGATTACAC	AACAGATCCT	CTGATCAC	ACTTGCAGC	TTCCAGAAA	AGGTTCTCTC	AGACATTTGA
AtNPQ1_cDNA	GCAAGTGAGG	TTGAAAAT	GTITGGGAAA	GCTTGGCAA	TC-----AGG	AAGGTCAGGT	AGAAACAGA
AtMAX3_cDNA	CCGGTTTCGG	TGGAGAGATG	TTACCTAGTC	ATTTGGATG	CT-----AAG	AAGATCGGTG	A-----A
AtHY2_cDNA	GAAAGAGCAG	CATGAGAGCT	CTCTCAGGTC	TATTCGATT	TC-----AAG	ATGATTCGTT	GAGT-TACCA
AtGUN4_cDNA	CAAAATACAG	CTTCTGATG	CTTCTCTCT	CTTTTCTTT	TTTTTTTAAAT	ATTG-----	- - - - -A
AtTRY_cDNA	TTCTTCTTAG	TTTGAAGAT	TCATCATCTA	TTGTTTCTT	TT-----	- - - - -	- - - - -
		4.420		4.440		4.460	
AtLNG1_cDNA	GGCAGCTTTT	TCATTGCTAA	TATTCCTAAT	TAACTTCCAC	TTAGAAATGT	AA-----ATC	AAGGAATCTA
AtSEX1_cDNA	GGCCCTGGAG	ATGCCALTGA	GAAACTCTAT	GGAAGTGCAC	AGGACATTGA	AGGTGTGATC	AGAGACGGGA
AtNPQ1_cDNA	ACCACCATTTG	TTGT-----	-----	-----	-----	-----	ACAACCTATA
AtMAX3_cDNA	TCCGATGCGG	TGGT-----	-----	-----	-----	-----	GTCGAGTGA
AtHY2_cDNA	TGCAATGTAG	TTTT-----	-----	-----	-----	-----	-ACAAGTGA
AtGUN4_cDNA	TTTTCTGATA	TTGT-----	-----	-----	-----	-----	-GAAGTATA
AtTRY_cDNA	- - - - -TGTTG	TTATTTG-	-----	-----	-----	-----	- - - - -ATTA
		4.500		4.520		4.540	
AtLNG1_cDNA	AATCATCCAT	TTTACAGAGT	TGAG--AACA	TTTTGTTTCT	TGGTTCCTG	AACCCCTTTC	-----
AtSEX1_cDNA	AGCTCTATGT	GGTCCAGACA	CGAC--CACA	AGTGTGATCA	-AATTCCTG	ACCACTTCTT	AATGTGTAGC
AtNPQ1_cDNA	TTATAATATC	TGTGTTCCGT	TCAT--ATAA	AGTAAATAT	TTGTACACAG	TCATCATCAT	-----
AtMAX3_cDNA	A--AGAAAG	TGTATAAGC	AAAA--ATCA	ATTAGATTAT	TTGTGTACAT	TCITTTTATT	-----
AtHY2_cDNA	- - - - -GC	TGTCAGCCCT	TCAT--CAAA	ATGAGATCC	TCGAGTATGA	TATGATTTT	-----
AtGUN4_cDNA	AACAATCTC	TGTAATCATTA	TCATTAALTA	AAATGGGATTT	CTCTTCAATG	TCAGTTCAT	TGTGATTATG
AtTRY_cDNA	TAATTTTAT	AGTATAGGTT	TCATTTGGTA	ATCAACTTTA	ATCCATGCGG	TTAGGTTT	-----
		4.560		4.580		4.600	
AtLNG1_cDNA	TTATGTTCTT	T-----	TCCTTAGT	TGTT--TAT	GTAACCTTCA	TAA-----	-----
AtSEX1_cDNA	TTACGTTTTT	TGTCAGTAA	ACTCCTTATT	TGCTCTATAA	GCAAAAGAGTA	TAAIACAGCA	TAAAGCAATA
AtNPQ1_cDNA	-----	-----	TCCATAAC	AAITGGATAC	AGAAAACACA	-----	-----
AtMAX3_cDNA	-----	-----	TTGATAGA	AAI	-----	-----	-----
AtHY2_cDNA	-----	-----	- - - - -	- - - - -	-----	-----	-----
AtGUN4_cDNA	CA-	-----	- - - - -	- - - - -	-----	-----	-----
AtTRY_cDNA	-----	-----	- - - - -	- - - - -	-----	-----	-----
		4.640		4.660		4.680	
AtLNG1_cDNA	-----	AAATGTTTTG	TAAAAG--	-----ACTC	CACTCAAGAT	AAAGCTCAAC	AATGT-TATA
AtSEX1_cDNA	GTGGATTACA	AAATGTTGAG	TACAAGACA	TTTGGCATTA	CCATTAAAGAT	ATAAATAAAA	AAACTGTTTA
AtNPQ1_cDNA	-----	-AGGATAAA	CA-	-----	TCCTTTGAGC	GAA--	- - - - -
AtMAX3_cDNA	-----	-ATTGCTTTT	CA-	-----	GCTTTGACAC	AAA-----	- - - - -
AtHY2_cDNA	-----	- - - - -	- - - - -	-----	-AATGAAAAT	GTA-----	- - - - -TCG
AtGUN4_cDNA	-----	- - - - -	- - - - -	-----	-TGATGAAC	AAAGCCAGAT	CATTAGTTAA
AtTRY_cDNA	-----	- - - - -	- - - - -	-----	- - - - -	- - - - -	- - - - -
AtLNG1_cDNA	TCCA	3540					
AtSEX1_cDNA	TTGG	4670					
AtNPQ1_cDNA	-AC	1776					
AtMAX3_cDNA	-TAA	1890					
AtHY2_cDNA	TCTC	1358					
AtGUN4_cDNA	T-G	994					
AtTRY_cDNA	-TT	645					