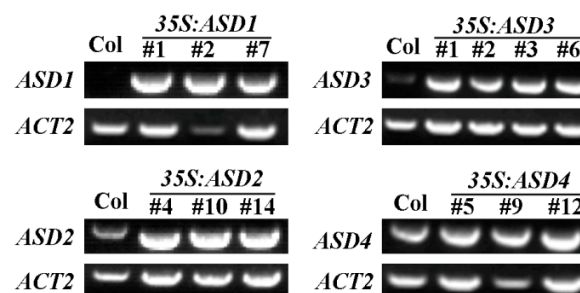
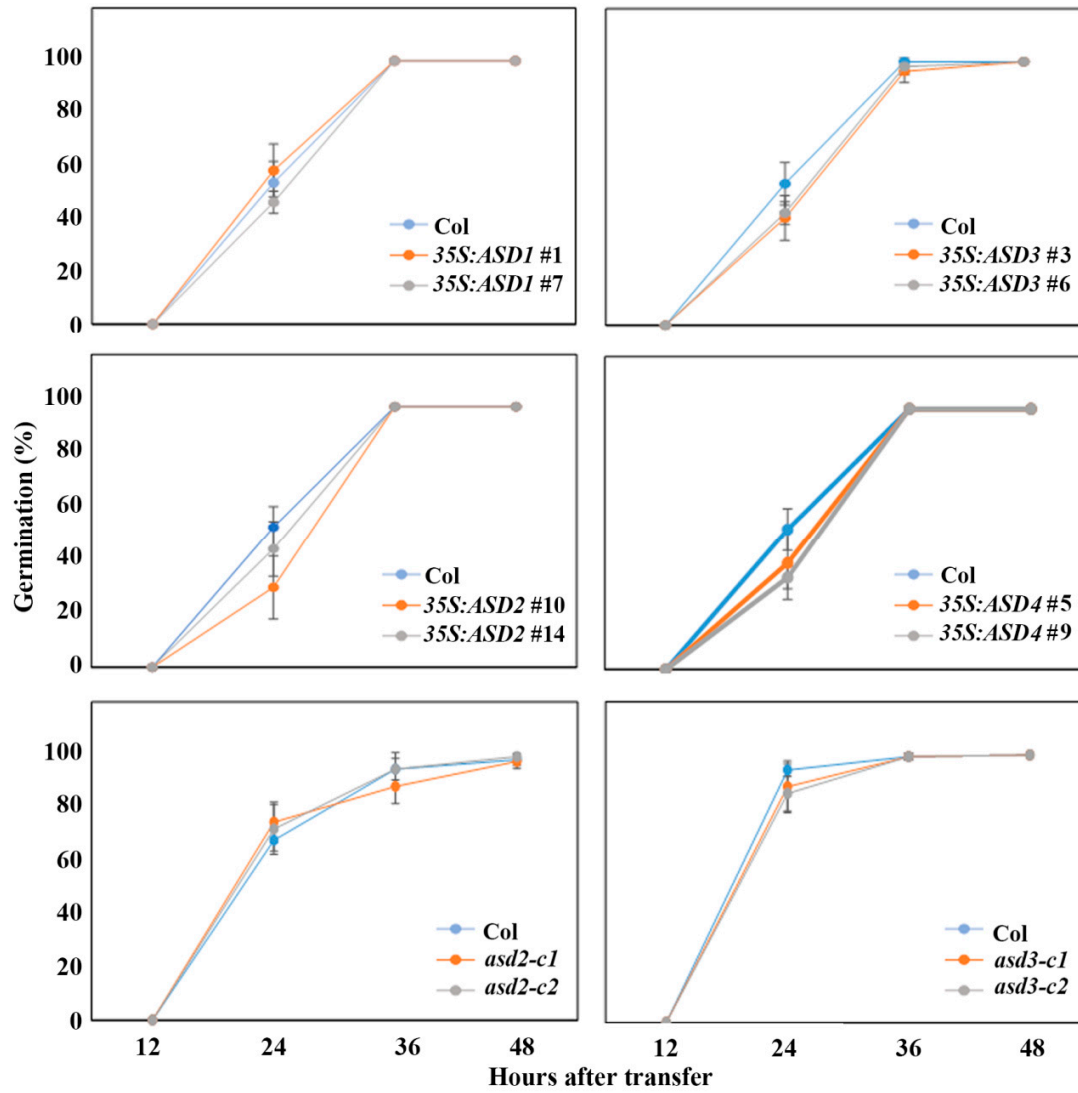


ASD1	ABRE	ACGTG	44	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	85	6+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	86	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	AACCCGG	198	7-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	AACCCGG	1523	7-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	1545	6-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	1546	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	1875	6-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	1876	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	AACCCGG	740	7-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
ASD2	ABRE	CACGTG	762	6-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	763	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	92	6+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	93	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	GACACGTGGC	492	9-	Triticum aestivum	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	494	6+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	495	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	GACACGTGGC	947	9-	Triticum aestivum	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	949	6-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	950	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
ASD3	ABRE	ACGTG	643	5-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	AACCCGG	1247	7+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	1823	6-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	1824	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	1850	6-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	1851	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
ASD4	ABRE	AACCCGG	51	7+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	627	6+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	628	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	654	6+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	655	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CGCACGTGTC	1033	9-	Hordeum vulgare	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	1035	6-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	1036	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	GACACGTGGC	1933	9-	Triticum aestivum	cis-acting element involved in the abscisic acid responsiveness
	ABRE	CACGTG	1935	6-	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness
	ABRE	ACGTG	1936	5+	Arabidopsis thaliana	cis-acting element involved in the abscisic acid responsiveness

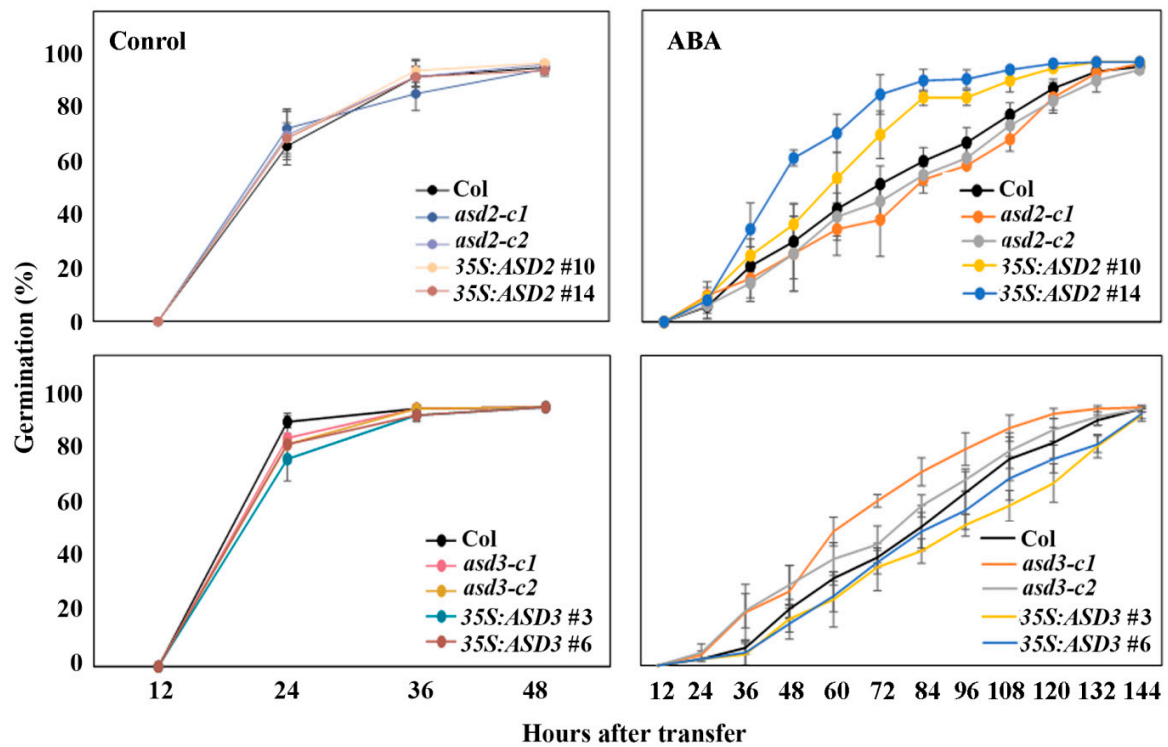
**Figure S1.** ABA response elements (ABREs) in the 2000bp promoter region of *ASDs*. ABREs in 2000bp sequences upstream of the start codon of *ASDs* were identified by using PlantCARE (ugent.be).



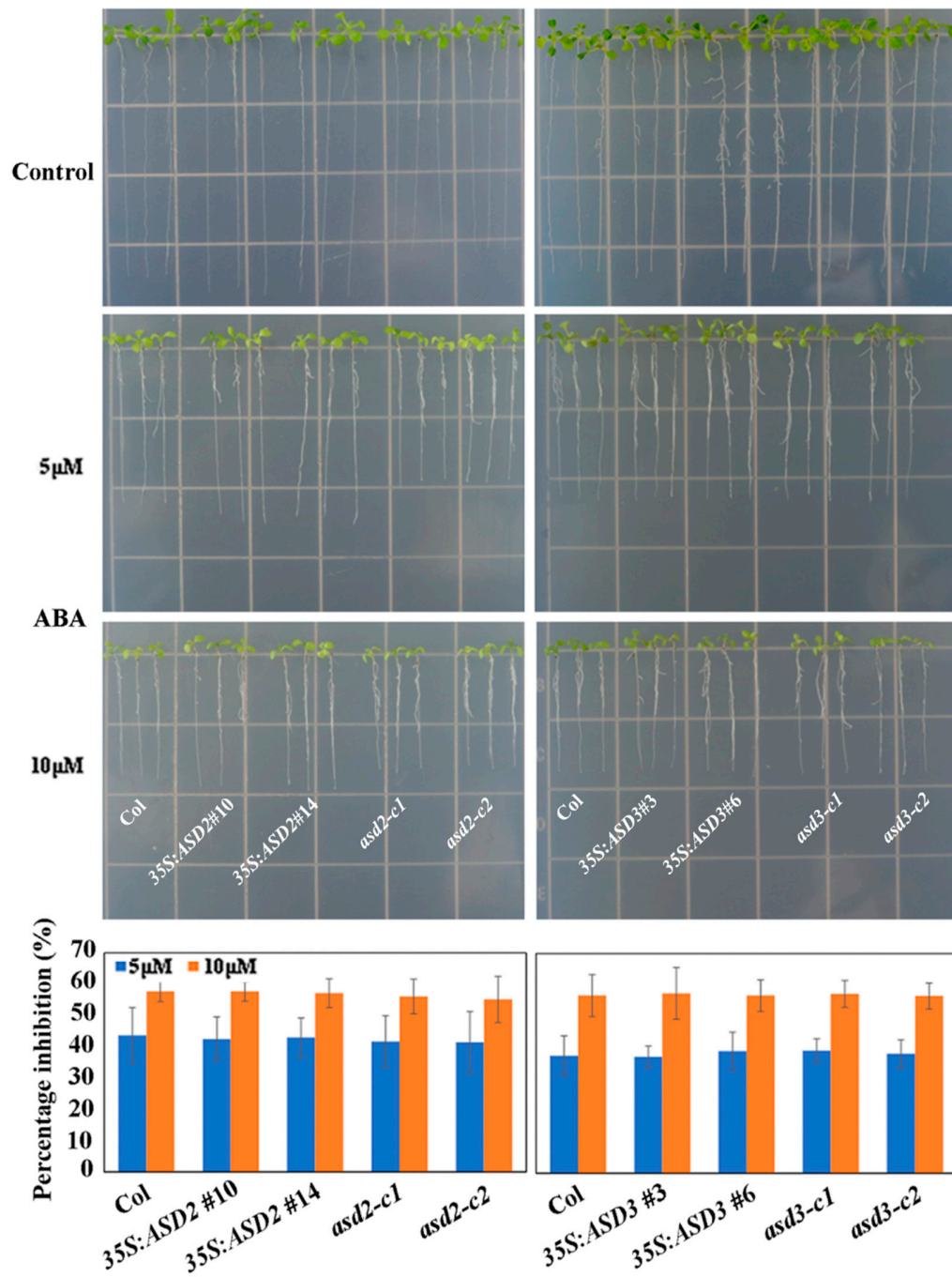
**Figure S2.** Expression of *ASD* genes in the overexpression transgenic plants. Total RNA was isolated from seedlings of the Col wild type and *ASD* overexpression transgenic plants, and used as template for RT-PCR analysis to examine the expression of *ASD* genes. *ACT2* was used as a control.



**Figure S3.** Seed germination of the Col wild type, the 35S:ASD transgenic plants and single mutants *asd2* and *asd3* in control plates as indicated in Figure 4 and Figure 7A respectively.



**Figure S4.** Effects of ABA on seed germination of the Col wild type, the 35S:*ASD2* and 35S:*ASD3* transgenic plants and the *asd2* and *asd3* mutants. The experiments were performed as indicated in Figure 4 and Figure 7A except that 2  $\mu$ M ABA was used for the experiments.



**Figure S5.** Effects of ABA on root elongation of the Col wild type, the *35S:ASD2* and *35S:ASD3* transgenic plants and the *asd2* and *asd3* mutants. Sterilized seeds were sown on 1/2 MS plates kept at 4 °C in darkness for 2 days and then transferred to a growth room grow vertically for 3 days, then seedlings were transferred into plates with or without ABA, and grow vertically for 5 day. Root length were measured before and 5 days after the transferred, percentage inhibition were calculated. Data represent the mean  $\pm$  SD of 12-25 seedlings.