

**Appendix B. Anthocyanin biosynthetic genes identified in *B.nigra***

	<i>A.thaliana</i>	<i>B.nigra</i>	Gene name
	AT2G37040.1	BniB028221	<i>PAL1</i>
	AT2G37040.1	BniB028223	<i>PAL1</i>
	AT2G37040.1	BniB012308	<i>PAL1</i>
	AT2G37040.1	BniB012309	<i>PAL1</i>
	AT2G37040.1	BniB016944	<i>PAL1</i>
	AT2G30490.1	BniB010855	<i>C4H</i>
	AT2G30490.1	BniB043687	<i>C4H</i>
	AT2G30490.1	BniB003955	<i>C4H</i>
	AT1G51680.1	BniB046377	<i>4CL1</i>
	AT3G21230.1	BniB021049	<i>4CL5</i>
	AT3G21230.1	BniB021050	<i>4CL5</i>
	AT3G21230.1	BniB014307	<i>4CL5</i>
	AT3G21230.1	BniB014308	<i>4CL5</i>
	AT3G21230.1	BniB003147	<i>4CL5</i>
	AT3G21230.1	BniB003145	<i>4CL5</i>
	AT3G51240.1	BniB033473	<i>F3H</i>
	AT3G51240.1	BniB047475	<i>F3H</i>
Structural genes	AT3G51240.1	BniB000790	<i>F3H</i>
	AT5G13930.1	BniB023877	<i>CHS</i>
	AT5G13930.1	BniB042378	<i>CHS</i>
	AT5G13930.1	BniB013945	<i>CHS</i>
	AT3G55120.1	BniB029928	<i>CHI</i>
	AT3G55120.1	BniB029929	<i>CHI</i>
	AT3G55120.1	BniB019552	<i>CHI</i>
	AT4G22880.1	BniB013124	<i>ANS</i>
	AT4G22880.1	BniB000533	<i>ANS</i>
	AT5G07990.1	BniB001474	<i>F3'H</i>
	AT5G08640.1	BniB001505	<i>FLS1</i>
	AT3G53260.1	BniB030019	<i>PAL2</i>
	AT3G53260.1	BniB019605	<i>PAL2</i>
	AT3G53260.1	BniB041075	<i>PAL2</i>
	AT3G10340.1	BniB005166	<i>PAL4</i>
	AT5G04230.2	BniB023644	<i>PAL3</i>
	AT5G04230.2	BniB023645	<i>PAL3</i>

## Regulatory genes

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AT5G42800.1	BniB037898	<i>DFR</i>
AT4G14090.1	BniB041798	<i>UGT75C1</i>
AT5G17050.1	BniB008565	<i>UGT78D2</i>
AT5G17050.1	BniB008562	<i>UGT78D2</i>
AT5G17050.1	BniB033670	<i>UGT78D2</i>
AT5G63580.1	BniB045858	<i>FSL2</i>
AT5G63580.1	BniB045602	<i>FSL2</i>
AT5G63580.1	BniB045601	<i>FSL2</i>
AT5G63580.1	BniB004210	<i>FSL2</i>
AT5G63580.1	BniB047000	<i>FSL2</i>
AT2G47460.1	BniB040450	<i>MYB12</i>
AT2G47460.1	BniB038685	<i>MYB12</i>
AT2G47460.1	BniB027523	<i>MYB12</i>
AT2G47460.1	BniB027522	<i>MYB12</i>
AT5G49330.1	BniB046321	<i>MYB111</i>
AT5G49330.1	BniB006749	<i>MYB111</i>
AT5G49330.1	BniB001014	<i>MYB111</i>
AT4G09820.1	BniB040724	<i>TT8</i>
AT1G63650.1	BniB026481	<i>EGL3</i>
AT1G63650.1	BniB011052	<i>EGL3</i>
AT1G66370.1	BniB049071	<i>MYB113</i>
AT1G66370.1	BniB049505	<i>MYB113</i>
AT3G49940.1	BniB029751	<i>LBD38</i>
AT3G49940.1	BniB000768	<i>LBD38</i>
AT4G37540.1	BniB037686	<i>LBD39</i>
AT4G37540.1	BniB036748	<i>LBD39</i>
AT5G24520.1	BniB000668	<i>TTG1</i>
AT5G41315.1	BniB008822	<i>GL3</i>
AT2G46410.1	BniB044522	<i>CPC</i>
AT1G71030.1	BniB037109	<i>MYBL2</i>
AT1G71030.1	BniB046413	<i>MYBL2</i>
AT5G67420.1	BniB045910	<i>LBD37</i>
AT5G67420.1	BniB004333	<i>LBD37</i>
AT5G67420.1	BniB047082	<i>LBD37</i>

Transport genes	AT5G17220.1	BniB008592	<i>TT19</i>
	AT5G17220.1	BniB003825	<i>TT19</i>

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