

Table 1 The ABC transporter protein family members and physico-chemical analysis in *Hydrangea*

Gene	Transcriptome code	NBD domain (aa)	Number of Amino acids (aa)	Molecular weight (ku)	Theoretical pI	Instability index	Aliphatic index	Grand average of hydropathicity	Subcellular localization
<i>HmABCA1</i>	c200548.graph_c1	595~774	774	84 773.43	5.75	37.89	102.83	0.129	Plasma membrane
<i>HmABCA2</i>	c210858.graph_c0	555~379	965	107 091.19	6.54	41.09	89.35	0.066	Plasma membrane
<i>HmABCA3</i>	c211005.graph_c0	589~771 1 497~1 684	1 895	210 905.64	7.33	36.75	99.14	0.121	Plasma membrane
<i>HmABCB1</i>	c162347.graph_c1	416~610	635	68 490.99	9.00	28.99	104.30	0.123	Plasma membrane
<i>HmABCB2</i>	c196483.graph_c0	212~398	463	49762.13	9.07	33.23	92.76	-0.088	Mitochondrion
<i>HmABCB3</i>	c221727.graph_c0	110~296	383	40962.45	5.57	46.04	90.44	-0.095	Chloroplast
<i>HmABCC1</i>	c156671.graph_c0	342~521 949~1136	1156	127494.92	6.00	39.57	106.31	0.133	Plasma membrane
<i>HmABCC2</i>	c158016.graph_c0	671~852 1 293~1 478	1509	169341.89	8.64	35.36	105.11	0.161	Plasma membrane
<i>HmABCC3</i>	c163586.graph_c0	642~825 1 266~1 459	1625	182946.00	7.94	43.69	105.87	0.078	Plasma membrane
<i>HmABCC4</i>	c176480.graph_c0	549~742	775	86007.39	5.58	36.45	102.53	0.113	Plasma membrane
<i>HmABCC5</i>	c185684.graph_c0	652~825 1 260~1 452	1480	165230.03	8.51	38.38	104.22	0.180	Plasma membrane
<i>HmABCC6</i>	c194263.graph_c0	38~163 587~779	797	88147.70	6.37	37.12	99.11	0.132	Plasma membrane
<i>HmABCC7</i>	c199439.graph_c0	245~428 912~1 098	1131	124928.99	6.90	39.02	100.08	-0.028	Plasma membrane
<i>HmABCC8</i>	c201746.graph_c0	607~781 1 220~1 410	1431	159549.09	6.38	43.29	107.38	0.279	Plasma membrane
<i>HmABCC9</i>	c206954.graph_c0	71~261 737~923	952	104331.25	6.28	39.93	101.36	-0.028	Mitochondrion
<i>HmABCC10</i>	c209063.graph_c0	665~807	807	90561.23	8.98	29.85	110.36	0.287	Plasma membrane
<i>HmABCC11</i>	c209888.graph_c0	101~274 699~895	943	104980.71	5.94	35.19	95.96	-0.046	Plasma membrane
<i>HmABCC12</i>	c210623.graph_c0	658~831	1105	124382.84	8.86	36.53	111.16	0.270	Plasma membrane
<i>HmABCC13</i>	c210746.graph_c1	288~478	1160	129578.10	7.55	33.29	94.38	-0.019	Plasma membrane

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<i>HmABCC14</i>	c211816.graph_c0	422~601 1 022~1 214	1232	136954.82	8.24	41.23	100.99	0.143	Plasma membrane
<i>HmABCC15</i>	c211939.graph_c0	612~786 1 224~1 415	1453	163353.08	8.66	37.59	107.54	0.146	Plasma membrane
<i>HmABCC16</i>	c211964.graph_c0	636~809 1 256~1 441	1480	164840.23	6.23	37.08	105.45	0.186	Plasma membrane
<i>HmABCC17</i>	c212580.graph_c0	655~828 1 284~1 476	1509	168549.07	7.16	40.71	105.06	0.104	Plasma membrane
<i>HmABCD1</i>	c145066.graph_c1	187~365	447	50591.64	5.67	41.37	86.82	-0.452	Chloroplast
<i>HmABCD2</i>	c181610.graph_c0	489~680	710	81049.43	8.89	39.08	97.73	-0.167	Chloroplast
<i>HmABCD3</i>	c185390.graph_c0	110~302	422	46660.23	5.26	38.56	80.40	-0.501	Chloroplast
<i>HmABCD4</i>	c190425.graph_c0	473~657	661	75060.47	9.49	35.88	100.14	-0.089	Chloroplast
<i>HmABCD5</i>	c201208.graph_c0	99~291	352	39600.73	5.18	32.30	86.68	-0.500	Chloroplast
<i>HmABCD6</i>	c207731.graph_c5	121~370	380	42868.70	5.35	44.70	90.32	-0.269	Chloroplast
<i>HmABCD7</i>	c210535.graph_c1	471~650 1 126~1 328	1338	149587.46	9.21	41.02	102.88	-0.053	Plasma membrane
<i>HmABCE1</i>	c143732.graph_c0	19~187	248	27992.16	9.11	29.09	87.22	-0.334	Plasma membrane
<i>HmABCE2</i>	c180499.graph_c1	101~292 369~497	497	55436.49	8.09	29.75	98.83	-0.137	Cytoplasm
<i>HmABCE3</i>	c197794.graph_c0	206~375	457	51409.11	6.31	35.03	90.22	-0.295	Chloroplast
<i>HmABCE4</i>	c207506.graph_c0	102~297 374~543	607	68563.02	8.08	34.88	88.93	-0.312	Nucleus
<i>HmABCF1</i>	c120618.graph_c0	1~170	195	21413.55	9.18	33.39	91.49	-0.202	Chloroplast
<i>HmABCF2</i>	c173288.graph_c1	58~232	252	27894.75	6.03	35.11	93.97	-0.206	Chloroplast
<i>HmABCF3</i>	c177935.graph_c1	53~195	201	21912.13	5.48	52.05	98.46	-0.069	Plasma membrane
<i>HmABCF4</i>	c183630.graph_c0	251~381	388	43383.37	6.20	39.10	88.04	-0.321	Nucleus
<i>HmABCF5</i>	c192449.graph_c0	58~236	271	30341.90	6.80	30.80	93.99	-0.284	Chloroplast
<i>HmABCF6</i>	c202770.graph_c1	227~510	557	61901.62	6.82	33.74	80.70	-0.452	Chloroplast
<i>HmABCF7</i>	c203124.graph_c0	195~397 527~703	728	81305.86	5.85	36.92	83.17	-0.625	Chloroplast

Continuing Table 1

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<i>HmABCF8</i>	c203715.graph_c0	320~487	578	63657.96	5.85	34.35	87.23	-0.174	Cytoplasm
<i>HmABCF9</i>	c204186.graph_c0	97~299 409~576	599	57010.75	6.03	35.15	89.45	-0.321	Chloroplast
<i>HmABCF10</i>	c205016.graph_c0	74~268 383~550	571	65497.26	5.77	39.96	93.43	-0.393	Chloroplast
<i>HmABCF11</i>	c208754.graph_c0	106~309	614	68354.81	6.54	31.41	87.39	-0.387	Chloroplast
<i>HmABCF12</i>	c210038.graph_c0	471~638 714~991	1063	118017.55	6.08	33.75	88.69	-0.354	Cytoplasm
<i>HmABCF13</i>	c211855.graph_c0	485~650 727~1 009	1068	116716.78	6.21	35.29	94.22	-0.211	Chloroplast
<i>HmABCG1</i>	c187439.graph_c0	99~289	661	73932.17	9.08	39.41	101.74	0.101	Plasma membrane