

Table S23. A list of DEGs that are involved with synthesis or control of cell wall components.

Presented are expression changes by RNA-seq calculated as mutant to parent ratio. Note that all shared genes have expression change in same direction in two adapted mutants except for three genes.

Standard Name	Assembly 19/21 Identifier	Ch	RNS-seq				Common DEG	ATAC-seq			
			JMC200-2-5		JMC160-2-5			JMC200-2-5		JMC160-2-5	
			Ratio mutant /parent	FDR	Ratio mutant /parent	FDR		Narrow	Broad	Narrow	Broad
Glucan synthesis genes											
<i>FKS1</i>	orf19.2929	1	NS	NS	0.7	0.03		NS	NS	1.2	0.9
<i>FKS3</i>	orf19.2465	1	1.8	0.00	1.5	0.03	<i>FKS3</i>	NS	NS	NS	NS
Chitin synthesis genes											
<i>CHS1</i>	orf19.5188	7	0.6	0.01	0.2	0.00	<i>CHS1</i> [†]	1.2	1.1	2.1	1.3
<i>CHS2</i>	orf19.7298	R	2.8	0.00	1.5	0.00	<i>CHS2</i>	NS	0.9	NS	NS
<i>CHS3</i> [*]	orf19.4937	1	1.3	0.00	0.8	0.00	<i>CHS3</i> [†]	NS	0.9	NS	0.9
<i>CHS5</i>	orf19.807	2	1.6	0.00	1.6	0.00	<i>CHS5</i>	NS	NS	NS	1.1
<i>CHS7</i>	orf19.2444	1	1.4	0.01	NS	NS		NS	NS	NS	NS
<i>CHS8</i>	orf19.5384	3	NS	NS	0.4	0.00		NS	NS	NS	NS
<i>CHT4</i>	orf19.1515	2	NS	NS	1.6	0.02		NS	NS	NS	1.1
Mannan synthesis genes											
<i>PMT1</i>	orf19.5171	7	1.4	0.01	1.7	0.00	<i>PMT1</i> [†]	NS	0.9	NS	0.77
<i>PMT2</i>	orf19.6812	3	1.7	0.00	2.2	0.00	<i>PMT2</i> [†]	NS	0.9	NS	0.88
<i>PMT4</i>	orf19.4109	2	NS	NS	1.7	0.00		NS	NS	1.2	NS
<i>PMT6</i>	orf19.3802	4	0.7	0.02	0.6	0.00	<i>PMT6</i>	NS	NS	NS	NS
<i>MNT1</i>	orf19.1665	3	NS	NS	1.6	0.00		NS	NS	NS	0.88

<i>CWH41</i>	orf19.4719	4	NS	NS	1.5	0.00		NS	NS	NS	NS
<i>MNS1</i>	orf19.1036	1	1.6	0.00	2.4	0.00	<i>MNS1</i> [†]	NS	0.9	NS	0.95
<i>MNN1</i>	orf19.4279	5	NS	NS	0.7	0.00		NS	NS	NS	NS
<i>MNN2</i>	orf19.2347	1	0.6	0.00	0.6	0.00	<i>MNN2</i>	NS	NS	1.2	1.12
<i>MNN4</i>	orf19.2881	4	0.7	0.01	NS	NS		0.9	NS	0.8	0.86
<i>MNN12</i>	orf19.4900	1	2.3	0.00	2.6	0.00	<i>MNN12</i>	NS	NS	NS	NS
<i>MNN14</i>	orf19.6996	3	0.3	0.00	0.5	0.00	<i>MNN14</i>	NS	NS	NS	NS
<i>MNN15</i>	orf19.753	1	NS	NS	0.6	0.00		NS	NS	NS	NS
<i>MNN22</i>	orf19.3803	4	0.6	0.00	0.3	0.00	<i>MNN22</i>	NS	0.96	NS	NS
<i>MNN24</i>	orf19.1995	2	3.5	0.00	3.3	0.00	<i>MNN24</i>	NS	NS	0.8	NS
<i>MNN26</i>	orf19.6692	7	0.7	0.02	NS	NS		NS	NS	NS	0.91
<i>BMT1</i>	orf19.6782	3	0.4	0.00	0.4	0.00	<i>BMT1</i> [†]	NS	0.92	0.8	0.8
<i>RHD1</i>	orf19.54	1	NS	NS	0.6	0.00		NS	NS	NS	NS
<i>BMT3</i>	orf19.3282	R	2.4	0.00	1.7	0.00	<i>BMT3</i>	NS	NS	0.8	NS
<i>BMT4</i>	orf19.5612	6	NS	NS	0.6	0.00		NS	0.92	0.8	0.77
<i>BMT5</i>	orf19.1464	2	1.8	0.00	NS	NS		NS	NS	NS	NS
<i>BMT6*</i>	orf19.5602	6	1.4	0.01	0.6	0.00	<i>BMT6</i>	NS	NS	NS	NS
<i>BMT7</i>	orf19.342	3	2.2	0.00	1.9	0.00	<i>BMT7</i> [†]	1.2	1.2	1.3	1.32
<i>MNT3</i>	orf19.1010	R	0.6	0.01	0.5	0.00	<i>MNT3</i>	NS	NS	1.2	NS
<i>ALG1</i>	orf19.4410	4	1.5	0.04	1.8	0.00	<i>ALG1</i>	NS	NS	NS	NS
<i>ALG6</i>	orf19.1843	R	NS	NS	2.1	0.00		NS	NS	NS	0.87
<i>ALG7</i>	orf19.2187	2	NS	NS	0.7	0.04		NS	NS	NS	1.09
<i>ALG11</i>	orf19.3468	6	0.4	0.00	0.6	0.01	<i>ALG11</i>	NS	NS	NS	NS
<i>CHK1*</i>	orf19.896	2	1.4	0.01	0.7	0.01	<i>CHK1</i>	NS	NS	NS	NS
Regulatory genes on Ch2 and Ch5											
<i>CHT2</i>	orf19.3895	5	0.3	0.00	0.2	0.00	<i>CHT2</i>	NS	NS	NS	1.1
<i>URA7</i>	orf19.3941	5	0.4	0.00	0.2	0.00	<i>URA7</i>	NS	NS	NS	NS
<i>RPO26</i>	orf19.2643	5	0.4	0.00	0.2	0.00	<i>RPO26</i>	NS	NS	NS	0.9
<i>HAS1</i>	orf19.396	5	0.6	0.00	0.3	0.00	<i>HAS1</i> [†]	NS	0.9	NS	0.9
<i>DUS4</i>	orf19.966	5	0.7	0.01	0.4	0.00	<i>DUS4</i>	NS	NS	1.2	NS

<i>RPS25B</i>	orf19.6663	5	0.6	0.00	0.5	0.00	<i>RPS25B</i>	NS	NS	NS	NS
<i>UAPI</i>	orf19.4265	5	0.6	0.00	0.5	0.00	<i>UAPI</i>	NS	NS	NS	NS
<i>CKSI</i>	orf19.1282	5	0.5	0.00	0.6	0.00	<i>CKSI</i>	NS	NS	NS	NS
NS	orf19.4149.1	5	0.5	0.00	0.5	0.00	Orf19.414 9.1	NS	NS	NS	NS
NS	orf19.970	5	NS	NS	0.5	0.00		NS	NS	NS	NS
<i>ECSI</i>	orf19.1766	2	2.1	0.03	2.1	0.03	<i>ECSI</i>	NS	NS	NS	NS
<i>ECS3</i>	orf19.5833	2	1.3	0.01	1.6	0.00	<i>ECS3</i>	NS	NS	0.8	NS
<i>PR26</i>	orf19.5793	2	1.4	0.00	1.9	0.00	<i>PR26</i>	NS	NS	NS	1.1
<i>LEU42</i>	orf19.1375	2	1.5	0.01	1.6	0.00	<i>LEU42</i>	NS	NS	1.1	NS

* Genes that changed their expression in opposite direction in two adapted mutants.

† Common DEGs having peaks in both adapted mutants.

NS stands for Not Significant.