

Additional file 6: Selected genes with known carpel expression patterns identified by the arrays.

Gene	Cluster	FC	Function	Expression Pattern	Ref.
A: Expression early in ovule primordia, placenta and integuments					
<i>NUB</i>	4	-1.6	Lateral growth, adaxial carpel growth	Adaxial carpel, placenta, ovule primordia.	[1]
<i>CRC</i>	8	-2.2	Carpel specification	Abaxial carpel, inner strand next to placenta.	[2]
<i>CUC2</i>	8	-1.7	Organ separation	Placenta, between ovule primordia, septum, nucellus/chalaza boundary.	[3]
<i>ER</i>	8	-1.4	Growth inhibitor signal	Early carpels, carpel walls, slightly in ovules	[4, 5]
<i>LFY</i>	8	-1.4	Floral induction	In carpels?	[6]
<i>PAN</i>	8	-2.2	Organ number	Early medial region, placenta, ovule primordia, slightly in later ovules	[7]
<i>SPT</i>	8	-1.5	Growth of medial carpel regions	Medial region, ridge, septum, stigma, ovule primordia, integument tips, mmc	[8]
<i>PIN1</i>	9	-1.6	Polar auxin transport	L1, carpel primordia, ovule primordia, integuments.	[9]
<i>ATML1</i>	6	-1.4	L1 identity	L1 of meristems, placenta, ovule primordia, integument primordia.	[10]
<i>BEL1</i>	10	-2.7	Chalazal specification	Chalaza and integuments.	[11]
<i>ATCEL2</i>	10	-1.7	Cellulase, wall extension	Placenta, ovule primordia, septum	[12]
<i>ETT</i>	10	-2.4	auxin response growth regulator	Abaxial carpel, replum	[13]
B: Expression in carpel, ovule primordia, integuments or embryo sac					
<i>MP</i>	0	-1.6	TF mediating auxin signals	Center of ovule primordia, adaxial carpel wall, integuments not described.	[14]
<i>PHB</i>	2	-1.6	Adaxial identity	Adaxial inner integument, carpel?	[15]
<i>ERL2</i>	2	-1.8	Epidermal patterning	Early carpels, ovules, outer integument higher, style.	[5]
<i>PDF2</i>	2	-1.8	L1 identity	L1 of carpel and ovule primordia, integuments not described	[16]
<i>AIL5</i>	2	-2.2	ANT-like control of organ size	Medial ridge, placenta, ovule primordia, distal funiculus and outer integument.	[17]
C: expression in carpel, ovule primordia or integuments late in development					
<i>FDH</i>	3	-1.4	Long chain lipids	Ovule primordia, integuments, later in chalazal pole.	[18]
<i>ERL1</i>	11	-2.0	Epidermal patterning	Early carpel primordia, ovules.	[5]
<i>PFS2</i>	11	-2.2	Repression of AG?	Placenta, ovule primordia, chalaza, integuments, nucellus.	[19]

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