

**Table S3. Quantitative cytological analysis of double mutant ovules in Stage 1**

Genotype	Class I	Class II	Class III	Class II + III	n	AI
<i>Col</i>	89.5 ± 1.23	10.49 ± 1.23	0 ± 0	10.49 ± 1.23	934	3
<i>Ler</i>	82.9 ± 1.61	16.52 ± 1.39	0.56 ± 0.33	17.24 ± 1.62	429	3
<i>Col x Ler (F1)</i>	83.37 ± 2.54	15.40 ± 2.88	1.21 ± 2.54	16.61 ± 2.54	243	4
<i>Col x Ler (F2)</i>	83.24 ± 1.37	15.95 ± 1.29	0.78 ± 0.57	16.74 ± 1.36	585	3
<i>ago9-3 AGO9 /ago4-1 AGO4 (F1)</i>	62.21 ± 0.97	31.95 ± 0.84	5.81 ± 0.47	37.76 ± 0.97	596	5
<i>ago9-3 AGO9 /ago4-1 AGO4 (F2)</i>	74.35 ± 1.01	22.79 ± 1.06	2.84 ± 1.01	25.64 ± 0.04	316	5
<i>ago9-3/+ ago4-1 (F2)</i>	66.66 ± 2.88	25.06 ± 0.57	8.26 ± 3.28	33.33 ± 2.88	263	3
<i>ago9-3 ago4-1/+ (F2)</i>	75.33 ± 0.64	21.45 ± 0.64	3.19 ± 0.92	24.65 ± 1.54	633	4
<i>ago9-3 ago4-1 (F2)</i>	73.69 ± 4.21	23.49 ± 5.57	2.8 ± 1.4	26.29 ± 4.21	270	3
<i>ago9-3 AGO9 /ago4-6 AGO4 (F1)</i>	70.09 ± 2.30	27.07 ± 2.04	2.82 ± 0.71	29.90 ± 2.30	989	8
<i>ago9-3 AGO9 /ago4-6 AGO4 (F2)</i>	79.45 ± 0.87	17.6 ± 0.71	2.92 ± 0.36	20.53 ± 0.87	441	4
<i>ago9-3/+ ago4-6 (F2)</i>	69.83 ± 1.49	26.35 ± 1.62	3.80 ± 1.62	30.16 ± 1.49	351	3
<i>ago9-3 /ago4-6 AGO4 (F2)</i>	77.99 ± 2.27	19.22 ± 2.03	2.78 ± 0.65	22.00 ± 2.27	452	4
<i>ago9-3 ago4-6 (F2)</i>	88.86 ± 1.41	9.75 ± 1.40	1.37 ± 0.55	11.13 ± 1.22	504	4
<i>AGO9 AGO4 (F2)</i>	90.86 ± 0.77	7.91 ± 0.90	1.22 ± 0.16	9.13 ± 0.77	318	4
<i>ago9-3 AGO9 /ago4-6 AGO4 (F3)</i>	76.43 ± 1.78	20.53 ± 2.10	3.02 ± 0.50	23.55 ± 1.78	558	4
<i>ago9-3 ago4-6 (F3)</i>	85.86 ± 1.35	12.61 ± 1.53	1.51 ± 0.43	14.13 ± 1.35	461	3
<i>AGO9 AGO4 (F3)</i>	89.98 ± 1.99	9.28 ± 1.70	0.33 ± 0.33	9.61 ± 1.60	296	3
<i>ago9-3 ago4-6 (F3) *</i>	80.32 ± 0.41	18.22 ± 0.58	0.46 ± 0.27	19.67 ± 0.41	457	3
<i>ago9-3 ago4-6 (F4)*</i>	72.9 ± 3.30	24.71 ± 3.28	3.08 ± 0.83	27.80 ± 3.30	657	4

**Class I:** ovules with a single MMC, **Class II:** ovules with two MMC-like cells, **Class III:** ovules with more than two MMC-like cells. n: total of ovules analyzed. AI: analyzed individuals. \*: Plants derived directly from a double homozygous parental line. Percentages and standard errors are given