

**Table S6. Gene set enrichment analysis of different gene sets in 35S:*miR396b* in comparison to wild type**

Gene set*	Size	NES†	Nominal P-value	False discovery rate	Significantly different from wild type‡
Mitosis-specific genes	79	-5.081	<0.000	<0.000	Yes
Histones	56	-3.922	<0.000	<0.000	Yes
Reference genes	25	0.877	0.597	0.605	No
DEFL	35	1.258	0.218	0.502	No
Photosynthesis	74	1.364	0.136	0.678	No

\*Gene set sources. Mitosis-specific genes are from Menges et al. (Menges et al., 2005). *Arabidopsis* histones and histone linker proteins from The Chromatin Database (Gendler et al., 2008). Reference genes are a selection of stably expressed genes (Czechowski et al., 2005) used in this analysis as a negative control. DEFL, defensin-like genes from Silverstein et al. (Silverstein et al., 2005). Photosynthesis, including Calvin cycle and light reactions, extracted from Aracyc ([www.arabidopsis.org](http://www.arabidopsis.org)).

†NES, normalized enrichment score. A negative value indicates downregulation in 35S:*miR396b* plants.

‡A gene set is significantly different in 35S:*miR396b* compared to wild type when the nominal P-value and false discovery rate are <0.05.

## References

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