

**Table S1.** Mass spectrometric analysis of JMJ14-3×Flag affinity purification. The percentage of JMJ14 (% JMJ14) column indicates the approximate stoichiometry of each co-purifying protein as a function of the normalized spectral abundance factor (NSAF). NAC transcription proteins are underlined.

<b>Protein</b>	<b>AGI code</b>	<b>Spectra</b>	<b>Unique Peptides</b>	<b>% Coverage</b>	<b>NSAF<sub>e5</sub></b>	<b>% JMJ14</b>
JMJ14	AT4G20400	717	42	33.1	7200.925	100
<u>NAC052</u>	<u>AT3G10490</u>	<u>44</u>	<u>9</u>	<u>26.2</u>	<u>878.896</u>	12.21
H2A	AT4G13570	9	2	7.6	610.989	8.48
	AT1G52740					
	AT2G38810					
	AT3G54560					
<u>NAC050</u>	<u>AT3G10480</u>	<u>28</u>	<u>7</u>	<u>19.7</u>	<u>564.303</u>	<u>7.84</u>
RPN12	AT1G64520	5	3	12	168.702	2.34
Putative calcium-binding protein	AT1G18210	3	2	17.6	158.977	2.21
YbaB family COG0718	AT2G24020	3	2	17	148.495	2.06
RPN3	AT1G75990	8	4	11.7	147.987	2.05
RPL21	AT1G35680	3	2	6.4	122.846	1.71
Putative DNA binding protein	AT1G49950	4	2	10.7	120.116	1.67
THF1	AT2G20890	4	3	11	120.116	1.67
ADP-ribosylation factor	AT2G47170	2	2	12.6	99.051	1.38
	AT1G23490					
	AT1G70490					
	AT3G62290					
	AT1G10630					
	AT5G14670					
AT1G70490						
Putative NAD <sup>+</sup> isocitrate dehydrogenase	At5g03290	4	2	6.7	96.35	1.34
3-oxoacyl-(acyl-carrier protein) reductase	AT1G24360	3	2	9.7	84.721	1.18
RPB36a	AT2G15430	3	2	10.3	84.721	1.18

ATP synthase gamma chain	AT2G33040	3	3	10.8	83.157	1.15
PRLI-interacting factor L	AT1G80480	4	2	5.9	81.159	1.13
Putative NAD <sup>+</sup> isocitrate dehydrogenase	AT3G09810	3	2	6.7	72.262	1
RPN9	AT4G19006	3	2	5.7	70.016	0.97
thylakoid lumenal protein-related	AT1G12250	2	2	12.1	64.348	0.89
NTF2 family protein	AT5G43960	3	2	7.7	64.271	0.89
Putative cyclohydrolase	AT3G12290	2	2	10	60.259	0.84
RPN1B	AT4G28470	5	5	5.9	57.971	0.81
DNAJ heat shock family protein	AT3G62600	2	2	9.8	52.073	0.72
ATIMPALPHA3	AT4G02150	3	3	7.7	50.897	0.71
dihydrolipoamide dehydrogenase 2	AT4G16155	3	2	4.1	47.665	0.66
CER2	AT4G24510	2	2	6.2	42.797	0.59
putative lactase	AT2G28470	4	2	4.5	42.294	0.58
clathrin adaptor complexes medium subunit family protein	AT1G60780	2	2	7.9	42.097	0.58
ERF1-1	AT5G47880	2	2	5.5	41.324	0.57
EMB3003	AT1G34430	2	2	7.3	38.747	0.54
F-box family protein	AT5G22610	2	2	1.9	38.172	0.53
ASN3	AT5G10240	2	2	4.7	31.199	0.43
ASN2	AT5G65010	2	2	4.7	31.145	0.43
glycosyl transferase family 20 protein	AT1G06410	2	2	3.1	21.172	0.29