

**Table S1.** Summary of chloroplast- and nucleus-encoded genes found in m<sup>6</sup>A epitranscriptomes of different accessions of *Arabidopsis*. The information of this table was extracted from 3 published epitranscriptome data and the ‘m<sup>6</sup>A-Atlas’ tool was used to predict updated numbers of methylation sites ([www.xjtlu.edu.cn/biologicalsciences/atlas](http://www.xjtlu.edu.cn/biologicalsciences/atlas)) [1].

Gene(s)	Name(s)	Gene Ontology	Accession(s)	m <sup>6</sup> A-Atlas	Reference(s)
AT1G24490	ALB4	Plastid organization	Con-0	1	[2] Supplementary Data 5
AT5G45390	CLPP4	Plastid organization	Con-0	4	
AT3G19720	ARC5	Plastid organization	Con-0	3	
AT3G48870	HSP93-III	Plastid organization	Con-0	2	
AT2G48120	PAC	Plastid organization	Con-0	0	
AT1G24490	ALB4	Plastid organization	Hen-16	1	
AT5G10490	MSL2	Plastid organization	Hen-16	0	
AT3G17040	HCF107	Plastid organization	Hen-16	4	
AT1G63900	DAL1	Plastid organization	Hen-16	5	
AT5G02250	EMB2730	Plastid organization	Hen-16	3	
AT3G16140	PSAH-1	photosynthesis	Con-0	0	
AT1G70760	CRR23	photosynthesis	Con-0	1	
AT4G28660	PSB28	photosynthesis	Con-0	0	
AT1G06680	PSBP-1	photosynthesis	Con-0	1	
AT3G61470	LHCA2	photosynthesis	Con-0	1	
AT5G66570	PSBO1	photosynthesis	Con-0	7	
AT4G28750	PSAE-1	photosynthesis	Con-0	5	
AT5G16440	IPP1	photosynthesis	Con-0	6	
AT3G16250	NDF4	photosynthesis	Con-0	9	
AT2G05100	LHCB2.1	photosynthesis	Con-0	1	
AT1G32060	PRK	photosynthesis	Con-0	4	
AT1G55670	PSAG	photosynthesis	Col-0	0	

AT2G05100	LHCB2	photosynthesis	Col-0	1	[3] Table 6
AT3G08940	LHCB4	photosynthesis	Col-0	4	
AT3G21055	PSBTN	photosynthesis	Col-0	0	
AT1G67740	PSBY	photosynthesis	Col-0	5	
AT1G03130	PSAD-2	photosynthesis	Col-0	12	
AT2G34420	LHB1B2	photosynthesis	Col-0	1	
AT1G15820	LHCB6	photosynthesis	Col-0	0	
AT4G10340	LHCB5	photosynthesis	Col-0	5	
AT1G61520	LHCA3	photosynthesis	Col-0	3	
AT2G06520	PSBX	photosynthesis	Col-0	0	
AT3G15190	PRPS20	photosynthesis	Col-0	0	[4] Table 6
ATCG01160	RRN5S	Chloroplast rRNA	Col-0	0	
ATCG01210	RRN16S	Chloroplast rRNA	Col-0	0	
ATCG00950	RNA23S	Chloroplast rRNA	Col-0	5	
ATCG00920	RRN16S	Chloroplast rRNA	Col-0	0	
ATCG00660	RPL20	ribosomal proteins	Col-0	0	
ATCG00650	RPS18	ribosomal proteins	Col-0	0	
ATCG00400	tRNA-Leu	tRNA	Col-0	2	
ATCG00550	PSBJ	photosystem reaction proteins	Col-0	0	
ATCG00510	PSAI	photosystem reaction proteins	Col-0	0	
ATCG00140	ATPH	ATP synthase subunit C	Col-0	0	
ATCG01130	TIC214	Ycf1 protein	Col-0	5	
ATCG01010	NDHF	NADH-Ubiquinone oxidoreductase	Col-0	3	
ATCG01040	YCF5	Cytochrome C assembly protein	Col-0	0	

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**Table S2.** Summary of characterized PPR proteins involved in organellar RNA editing in Arabidopsis. The information of this table was extracted from the Prepact database (<http://www.prepact.de/prepact-main.php>).

Abbreviation	Name	GenPept	Organism	PLS repeats	Terminal domain	Reference(s)	Editing sites
CRR4	Chlororespiratory Protein 4	<a href="#">NP_182060.2</a>	<i>Arabidopsis thaliana</i>	14	dDYW	[1] [2] [3] [4] [5] [6] [7] [8]	ndhDeU2TM (cp)
AEF1	atpF Editing Factor 1	<a href="#">NP_188854.1</a>	<i>Arabidopsis thaliana</i>	18	dDYW	[9]	atpFeU92PL (cp) nad5eU1580SL (mt)
CLB19 PDE247	Chloroplast Biogenesis 19 Pigment Defective 247	<a href="#">NP_172066.3</a>	<i>Arabidopsis thaliana</i>	10	dDYW	[10] [5] [7] [11] [12] [13] [14]	clpPeU559HY (cp) rpoAeU200SF (cp)
CRR21	Chlororespiratory Protein 21	<a href="#">NP_200385.1</a>	<i>Arabidopsis thaliana</i>	20	dDYW	[3] [5] [7] [15]	ndhDeU383SL (cp)
CRR22	Chlororespiratory Protein 22	<a href="#">NP_172596.1</a>	<i>Arabidopsis thaliana</i>	16	DYW	[16]	ndhBeU746SF (cp)

						[5]	ndhDeU887PL (cp)
						[17]	rpoBeU551SL (cp)
							accDeU+101 (cp)
							accDeU794SL (cp)
ECB2	Early Chloroplast Biogenesis 2	<a href="#">NP_173004.1</a>	<i>Arabidopsis thaliana</i>	17	dDYW	[18]	ndhFeU290SL (cp)
VAC1	Vanilla Cream 1					[19]	ndhGeU50SF (cp)
						[20]	petLeU5PL (cp)
							rpoAcU200SF (cp)
							rpoC1eU488SL (cp)
						[16]	
CRR28	Chlororespiratory Protein 28	<a href="#">NP_176180.1</a>	<i>Arabidopsis thaliana</i>	10	DYW	[5]	ndhBeU467PL (cp)
						[15]	ndhDeU878SL (cp)
						[21]	
						[14]	
DOT4	Defectively Organized Tributaries 4	<a href="#">NP_193610.1</a>	<i>Arabidopsis thaliana</i>	18	DYW	[22]	rpoC1eU488SL (cp)
FLV	Flavodentata						
ELI1	Editing Lacking Insertional 1	<a href="#">NP_195454.1</a>	<i>Arabidopsis thaliana</i>	10	DYW	[22]	ndhBeU830SL (cp)
LPA66	Low PSII Accumulation 66	<a href="#">NP_199702.1</a>	<i>Arabidopsis thaliana</i>	11	DYW	[23]	psbFeU77SF (cp)
						[16]	
OTP80	Organelle Transcript Processing 80	<a href="#">NP_200728.2</a>	<i>Arabidopsis thaliana</i>	11	dDYW	[15]	rpl23eU89SL (cp)
							accDeU+101 (cp)
OTP81	Organelle Transcript Processing 81	<a href="#">NP_180537.1</a>	<i>Arabidopsis thaliana</i>	14	DYW	[16]	matKeU640HY (cp)
QED1	Quintuple Editing Factor					[24]	ndhBeU872SL (cp)
							rpoBeU2432SL (cp)
							rps12i114eU58 (cp)
						[25]	ndhBeU836SL (cp)
OTP82	Organelle Transcript Processing 82	<a href="#">NP_172286.1</a>	<i>Arabidopsis thaliana</i>	13	DYW	[17]	ndhGeU50SF (cp)

						[7]	
						[11]	
OTP84	Organelle Transcript Processing 84	<a href="#">NP_191302.2</a>	<i>Arabidopsis thaliana</i>	17	DYW	[16]	ndhBeU1481PL (cp)
						[26]	ndhFeU290SL (cp)
							psbZeU50SL (cp)
OTP85	Organelle Transcript Processing 85	<a href="#">NP_178398.1</a>	<i>Arabidopsis thaliana</i>	10	DYW	[16]	ndhDeU674SL (cp)
						[15]	
OTP86	Organelle Transcript Processing 86	<a href="#">NP_191896.2</a>	<i>Arabidopsis thaliana</i>	19	DYW	[16]	rps14eU80SL (cp)
PpPPR_45	Pentatricopeptide Repeat Protein 45	<a href="#">XP_024389794.1</a>	<i>Physcomitrella patens</i>	25	DYW	[27]	rps14eU-1 (cp)
							rps14eU2TM (cp)
						[5]	
RARE1	Required for accD RNA Editing 1	<a href="#">NP_196831.1</a>	<i>Arabidopsis thaliana</i>	15	DYW	[24]	accDeU794SL (cp)
						[21]	
						[14]	
YS1	Yellow Seedlings 1	<a href="#">NP_001189950.1</a>	<i>Arabidopsis thaliana</i>	16	DYW	[28]	rpoBeU338SF (cp)
						[5]	
CREF7	Chloroplast RNA Editing Factor 7	<a href="#">NP_201453.1</a>	<i>Arabidopsis thaliana</i>	10	DYW	[29]	ndhBeU1255HY (cp)
						[26]	
CREF3	Chloroplast RNA Editing Factor 3	<a href="#">NP_188050.1</a>	<i>Arabidopsis thaliana</i>	10	DYW	[29]	psbEeU214PS (cp)
PDM1	Pigment Deficient Mutant 1	<a href="#">NP_193587.4</a>	<i>Arabidopsis thaliana</i>	14	dE	[30]	accDeU+101 (cp)
SEL1	Seedling Lethal 1					[31]	accDeU794SL (cp)
PPR6	Pentatricopeptide Repeat Protein 6	<a href="#">XP_015639788.1</a>	<i>Oryza sativa Japonica Group</i>	17	dDYW	[32]	ndhBeU737PL (cp)
PGL1	Pale Green Leaves 1	<a href="#">XP_015618645.1</a>	<i>Oryza sativa Japonica Group</i>	13	DYW	[33]	ccmFCeU543VV (mt)
							ndhDeU878SL (cp)
ECD1	Early Chloroplast Development 1	<a href="#">NP_190486.2</a>	<i>Arabidopsis thaliana</i>	17	DYW	[34]	accDeU794SL (cp)
EMB2261	Embryo-defective 2261					[35]	ndhBeU836SL (cp)
							ndhDeU878SL (cp)

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