

Table 1a: New nomenclature for small ribosomal subunit proteins of bacterial, archaeal, fungal and mammalian (mito)ribosomes.

Cytoplasmic ribosome New name ⁽¹⁾	Occurrence ⁽²⁾	Bacteria Old name	Yeast Old name	Human Old name	Mitoribosome New name ⁽¹⁾	Mammalian mitoribosome Old name	Yeast mitoribosome Old name
bS1	B m c	S1	–	–	bS1m	MRPS28	MRP51
uS2	BAE m c	S2	S0	SA	uS2m	MRPS2	MRP4
uS3	BAE m c	S3	S3	S3	uS3m	MRPS24	VAR1
uS4	BAE m c	S4	S9	S9	uS4m	–	NAM9
uS5	BAE m c	S5	S2	S2	uS5m	MRPS5	MRPS5
bS6	B m c	S6	–	–	bS6m	MRPS6	MRP17
uS7	BAE m c	S7	S5	S5	uS7m	MRPS7	RSM7
uS8	BAE m c	S8	S22	S15A	uS8m	–	MRPS8
uS9	BAE m c	S9	S16	S16	uS9m	MRPS9	MRPS9
uS10	BAE m c	S10	S20	S20	uS10m	MRPS10	RSM10
uS11	BAE m c	S11	S14	S14	uS11m	MRPS11	MRPS18
uS12	BAE m c	S12	S23	S23	uS12m	MRPS12	MRPS12
uS13	BAE m c	S13	S18	S18	uS13m	–	SWS2
uS14	BAE m c	S14	S29	S29	uS14m	MRPS14	MRP2
uS15	BAE m c	S15	S13	S13	uS15m	MRPS15	MRPS28
bS16	B m c	S16	–	–	bS16m	MRPS16	MRPS16
uS17	BAE m c	S17	S11	S11	uS17m	MRPS17	MRPS17
bS18	B m c	S18	–	–	bS18m	MRPS18C	RSM18
uS19	BAE m c	S19	S15	S15	uS19m	–	RSM19
bS20	B c	S20	–	–	–	–	–
bS21	B m c	S21	–	–	bS21m	MRPS21	MRP21
bTHX ⁽⁵⁾	B m c	THX	–	–	–	–	–
eS1	AE	–	S1	S3A	–	–	–
eS4	AE	–	S4	S4	–	–	–
eS6	AE	–	S6	S6	–	–	–
eS7	E	–	S7	S7	–	–	–
eS8	AE	–	S8	S8	–	–	–
eS10	E	–	S10	S10	–	–	–
eS12	E	–	S12	S12	–	–	–
eS17	AE	–	S17	S17	–	–	–
eS19	AE	–	S19	S19	–	–	–
eS21	E	–	S21	S21	–	–	–
eS24	AE	–	S24	S24	–	–	–
eS25	AE	–	S25	S25	–	–	–
eS26	E	–	S26	S26	–	–	–
eS27	AE	–	S27	S27	–	–	–
eS28	AE	–	S28	S28	–	–	–
eS30	AE	–	S30	S30	–	–	–
eS31	AE	–	S31	S27A	–	–	–
eS32 ⁽⁴⁾	AE	–	L41, eL41	L41, eL41	–	–	–
RACK1	E	–	Asc1	RACK1	–	–	–
–	m	–	–	–	mS22	MRPS22	–
–	m	–	–	–	mS23	MRPS23	RSM25
–	m	–	–	–	mS25	MRPS25	–
–	m	–	–	–	mS26	MRPS26	PET123
–	m	–	–	–	mS27	MRPS27	–
–	m	–	–	–	mS29 (DAP3) ⁽³⁾	MRPS29, DAP3	RSM23
–	m	–	–	–	mS31 ⁽⁶⁾	MRPS31	–
–	m	–	–	–	mS33	MRPS33	RSM27
–	m	–	–	–	mS34	MRPS34	–
–	m	–	–	–	mS35	MRPS35	RSM24
–	m	–	–	–	mS37	MRPS37, CHCHD1	MRP10
–	m	–	–	–	mS38 ⁽⁷⁾	MRPS38, AURKAIP1	COX24
–	m	–	–	–	mS39	MRPS39, PTC3	–
–	m	–	–	–	mS40	MRPS18B	–
–	m	–	–	–	mS41	–	FYV4
–	m	–	–	–	mS42	–	RSM26
–	m	–	–	–	mS43	–	MRP1
–	m	–	–	–	mS44	–	MRP13
–	m	–	–	–	mS45	–	MRPS35
–	m	–	–	–	mS46 ⁽⁶⁾	–	RSM28
–	m	–	–	–	mS47	–	EHD3

⁽¹⁾ Pre- and suffixes: b: bacterial, e: eukaryotic, u: universal, m: mitochondrial, c: chloroplast

⁽²⁾ Evolutionary occurrence: B: Bacteria, A: Archaea, E: Eukaryotes, m: Mitochondria, c: Chloroplasts

⁽³⁾ Alternative names in brackets may remain in use because the protein performs an established extraribosomal function.

⁽⁴⁾ Found associated with the small subunit in all recent ribosomal cryo-EM structures including animals, plants, fungi, most protozoa and some archaea, therefore renamed from eL41 to eS32.

⁽⁵⁾ Present in plant mitochondria and chloroplasts (see Table 2a).

⁽⁶⁾ Mammalian mS31 occupies the same position as yeast mS46, with two helices in similar orientation and direction, but on sequence level these two proteins are not evolutionary related and therefore named differently.

⁽⁷⁾ N-terminus homologous and localization similar to bS22 in *Actinobacteria* and *Bacteroidetes*. Localizes closely to eS32 but with different rRNA contacts.

Table 1b: New nomenclature for large ribosomal subunit proteins of bacterial, archaeal, fungal and mammalian (mito)ribosomes.

Cytoplasmic ribosome New name ⁽¹⁾	Occurrence ⁽²⁾	Bacteria Old name	Yeast Old name	Human Old name	Mitoribosome New name ⁽¹⁾	Mammalian mitoribosome Old name	Yeast mitoribosome Old name
uL1	BAE m c	L1	L1	L10A	uL1m	MRPL1	MRPL1
uL2	BAE m c	L2	L2	L8	uL2m	MRPL2	RML2
uL3	BAE m c	L3	L3	L3	uL3m	MRPL3	MRPL9
uL4	BAE m c	L4	L4	L4	uL4m	MRPL4	YML6
uL5	BAE m c	L5	L11	L11	uL5m	–	MRPL7
uL6	BAE m c	L6	L9	L9	uL6m	–	MRPL6
bL9	B m c	L9	–	–	bL9m	MRPL9	MRPL50
uL10	BAE m c	L10	P0	P0	uL10m	MRPL10	MRPL11
uL11	BAE m c	L11	L12	L12	uL11m	MRPL11	MRPL19
bL12	B m c	L7/L12	–	–	bL12m	MRPL12	MNP1
uL13	BAE m c	L13	L16	L13A	uL13m	MRPL13	MRPL23
uL14	BAE m c	L14	L23	L23	uL14m	MRPL14	MRPL38
uL15	BAE m c	L15	L28	L27A	uL15m	MRPL15	MRPL10
uL16	BAE m c	L16	L10	L10	uL16m	MRPL16	MRPL16
bL17	B m c	L17	–	–	bL17m	MRPL17	MRPL8
uL18	BAE m c	L18	L5	L5	uL18m	MRPL18	–
bL19	B m c	L19	–	–	bL19m	MRPL19	IMG1
bL20	B m c	L20	–	–	bL20m	MRPL20	–
bL21	B m c	L21	–	–	bL21m	MRPL21	MRPL49
uL22	BAE m c	L22	L17	L17	uL22m	MRPL22	MRPL22
uL23	BAE m c	L23	L25	L23A	uL23m	MRPL23	MRP20, MRPL41
uL24	BAE m c	L24	L26	L26	uL24m	MRPL24	MRPL40
bL25	B m	L25	–	–	–	–	–
bL27	B m c	L27	–	–	bL27m	MRPL27	MRP7
bL28	B m c	L28	–	–	bL28m	MRPL28	MRPL24
uL29	BAE m c	L29	L35	L35	uL29m	MRPL47	MRPL4
uL30	BAE m	L30	L7	L7	uL30m	MRPL30	MRPL33
bL31	B m c	L31	–	–	bL31m	MRPL55	MRPL36
bL32	B m c	L32	–	–	bL32m	MRPL32	MRPL32
bL33	B m c	L33	–	–	bL33m	MRPL33	MRPL39
bL34	B m c	L34	–	–	bL34m	MRPL34	MRPL34
bL35	B m c	L35	–	–	bL35m	MRPL35	YNL122C
bL36	B m c	L36	–	–	bL36m	MRPL36	RTC6
eL6	E	–	L6	L6	–	–	–
eL8	AE	–	L8	L7A	–	–	–
eL13	AE	–	L13	L13	–	–	–
eL14	AE	–	L14	L14	–	–	–
eL15	AE	–	L15	L15	–	–	–
eL18	AE	–	L18	L18	–	–	–
eL19	AE	–	L19	L19	–	–	–
eL20 ⁽⁴⁾	AE	–	L20	L18A	–	–	–
eL21	AE	–	L21	L21	–	–	–
eL22	E	–	L22	L22	–	–	–
eL24	AE	–	L24	L24	–	–	–
eL27	E	–	L27	L27	–	–	–
eL28	E	–	–	L28	–	–	–
eL29	E	–	L29	L29	–	–	–
eL30	AE	–	L30	L30	–	–	–
eL31	AE	–	L31	L31	–	–	–
eL32	AE	–	L32	L32	–	–	–
eL33	AE	–	L33	L35A	–	–	–
eL34	AE	–	L34	L34	–	–	–
eL36	E	–	L36	L36	–	–	–
eL37	AE	–	L37	L37	–	–	–
eL38	AE	–	L38	L38	–	–	–
eL39	AE	–	L39	L39	–	–	–
eL40	AE	–	L40	L40	–	–	–
eS32 ⁽⁵⁾	AE	–	L41, eL41	L41, eL41	–	–	–
eL42	AE	–	L42	L36A	–	–	–
eL43	AE	–	L43	L37A	–	–	–
P1/P2	AE	–	P1/P2 (AB)	P1/P2 (αβ)	–	–	–
–	m	–	–	–	mL37	MRPL37	–
–	m	–	–	–	mL38	MRPL38	MRPL35
–	m	–	–	–	mL39	MRPL39	–
–	m	–	–	–	mL40	MRPL40	MRPL28
–	m	–	–	–	mL41	MRPL41	MRPL27
–	m	–	–	–	mL42	MRPL42	–
–	m	–	–	–	mL43	MRPL43	MRPL51
–	m	–	–	–	mL44	MRPL44	MRPL3
–	m	–	–	–	mL45	MRPL45	–
–	m	–	–	–	mL46	MRPL46	MRPL17
–	m	–	–	–	mL48	MRPL48	–
–	m	–	–	–	mL49	MRPL49	IMG2
–	m	–	–	–	mL50	MRPL50	MRPL13
–	m	–	–	–	mL51	MRPL51	–
–	m	–	–	–	mL52	MRPL52	–
–	m	–	–	–	mL53	MRPL53	MRPL44
–	m	–	–	–	mL54	MRPL54	MRPL37
–	m	–	–	–	mL57	–	MRPL15
–	m	–	–	–	mL58	–	MRPL20
–	m	–	–	–	mL59 ⁽⁷⁾	–	MRPL25
–	m	–	–	–	mL60 ⁽⁶⁾	–	MRPL31
–	m	–	–	–	mL61	–	MRP49
–	m	–	–	–	mL62 (ICT1) ⁽³⁾	MRPL58, ICT1	–
–	m	–	–	–	mL63 ⁽⁶⁾	MRPL57, MRP63	–
–	m	–	–	–	mL64 ⁽⁷⁾ (CRIF1) ⁽³⁾	MRPL59, CRIF1	–
–	m	–	–	–	mL65	MRPS30, PDCD9	–
–	m	–	–	–	mL66	MRPS18A	–
–	m	–	–	–	mL67	–	MHR1

⁽¹⁾ Pre- and suffixes: b: bacterial, e: eukaryotic, u: universal, m: mitochondrial, c: chloroplast

⁽²⁾ Evolutionary occurrence: B: Bacteria, A: Archaea, E: Eukaryotes, m: Mitochondria, c: Chloroplasts

⁽³⁾ Alternative names in brackets may remain in use because the protein performs an established extraribosomal function.

⁽⁴⁾ Protein LX in Archaea

⁽⁵⁾ So far only found in the LSU of *S. cerevisiae* and related fungi (*K. lactis*, *T. thermophila*, *C. albicans*) at a peripheral, secondary non-canonical binding site.

⁽⁶⁾ Mammalian mL63 occupies the same position as yeast mL60, with N-terminus including first helix in similar orientation and direction, but on sequence level these two proteins are not evolutionary related and therefore named differently.

⁽⁷⁾ Mammalian mL64 occupies the same position as yeast mL59, with the C-terminal helix in similar orientation and direction, but on sequence level these two proteins are not evolutionary related and therefore named differently.

Table 2a: New nomenclature for proteins of the plant small ribosomal subunits (including ribosomes from organelles).

Plant cytoplasmic ribosome New name ⁽¹⁾		Occurrence ⁽²⁾	Plant cytoplasmic ribosome Old name ⁽³⁾	Plant mitochondrial ribosome New name ⁽¹⁾		Plant mitochondrial ribosome Old name ⁽³⁾	Plant chloroplast ribosome New name ⁽¹⁾		Plant chloroplast ribosome Old name ⁽³⁾
–	–	B m c	–	–	–	–	bS1c	AT5G30510	RPS1, PRPS1
uS2y	AT3G04770	BAE m c	RPSAB	uS2m	AT3G03600	MRPS2	uS2c	ATCG00160	RPS2
uS2z	AT1G72370		RPSAA						
uS3x	AT5G35530	BAE m c	S3	uS3m	ATMG00090	S3	uS3c	ATCG00800	RPS3
uS3y	AT3G53870		S3						
uS3z	AT2G31610		S3						
uS4y	AT5G39850	BAE m c	S4	uS4m	ATMG00290	MRPS4	uS4c	ATCG00380	RPS4
uS4z	AT5G15200		S4						
uS5u	AT1G58983	BAE m c	S5	uS5m	AT1G64880	S5	uS5c	AT2G33800	PRPS5, SCA1, EMB3113
uS5v	AT1G58684		S5						
uS5w	AT3G57490		S5						
uS5x	AT2G41840		S5						
uS5y	AT1G59359		S5						
uS5z	AT1G58380		S5, XW6						
–	–	B m c	–	bS6m	AT3G18760	S6	bS6c	AT1G64510	PRPS6
uS7y	AT3G11940	BAE m c	RPS5A, AML1	uS7m	ATMG01270	MRPS7	uS7cy	ATCG01240	RPS7.2
uS7z	AT2G37270		RPS5B					uS7cz	ATCG00900
uS8w	AT5G59850	BAE m c	S8	uS8my	AT4G29430	RPS15AE	uS8c	ATCG00770	RPS8
uS8x	AT3G46040		RPS15AD						
uS8y	AT2G39590		S15a						
uS8z	AT1G07770		RPS15A						
uS9x	AT5G18380	BAE m c	S5 domain 2-like	uS9m	AT3G49080	RPS9M	uS9c	AT1G74970	RPS9, TWN3
uS9y	AT3G04230		S5 domain 2-like						
uS9z	AT2G09990		S5 domain 2-like						
uS10x	AT5G62300	BAE m c	S10p/S20e	uS10m	AT3G22300	RPS10	uS10c	AT3G13120	PRPS10
uS10y	AT3G47370		S10p/S20e						
uS10z	AT3G45030		S10p/S20e						
uS11x	AT3G52580	BAE m c	S11	uS11m	AT1G31817	L18p/L5e, NFD3	uS11c	ATCG00750	RPS11
uS11y	AT3G11510		S11						
uS11z	AT2G36160		S11						
uS12y	AT5G02960	BAE m c	S12/S23	uS12m	ATMG00980	S12/S23, RPSL2	–	–	–
uS12z	AT3G09680		S12/S23						
uS13x	AT4G09800	BAE m c	RPS18C	uS13m	AT1G77750	S13/S18	uS13c	AT5G14320	S13/S18, EMB3137
uS13y	AT1G34030		S13/S18						
uS13z	AT1G22780		RPS18A, PFL1						
uS14x	AT4G33865	BAE m c	S14p/S29e	uS14m	AT2G34520	RPS14	uS14c	ATCG00330	RPS14
uS14y	AT3G44010		S14p/S29e						
uS14z	AT3G43980		S14p/S29e						
uS15y	AT4G00100	BAE m c	RPS13A, PFL2	uS15my	AT1G80620	S15/NS1	uS15c	ATCG01120	RPS15
uS15z	AT3G60770		S13/S15						
–	–	B m c	–	bS16m	AT5G56940	S16	bS16c	ATCG00050	RPS16
uS17x	AT5G23740	BAE m c	RPS11-BETA	uS17m	AT1G49400	OB-fold-like, EMB1129	uS17c	AT1G79850	RPS17, PDE347
uS17y	AT4G30800		OB-fold-like						
uS17z	AT3G48930		OB-fold-like, EMB1080						
–	–	B m c	–	bS18m	AT1G07210	S18	bS18c	ATCG00650	RPS18
uS19u	AT1G04270	BAE m c	S15	uS19m	AT5G47320	MRPS19	uS19c	ATCG00820	RPS19
uS19v	AT5G63070		S19						
uS19w	AT5G43640		S19						
uS19x	AT5G09510		S19						
uS19y	AT5G09500		S19						
uS19z	AT5G09490		S19						
–	–	B m c	–	–	–	–	bS20c	AT3G15190	PRPS20
–	–	B m c	–	bS21m	AT3G26360	S21	bS21c	AT3G27160	RPS21, GHS1
–	–	B m c	–	bTHXm	AT2G21290	S31	bTHXc	AT2G38140	PSRP4
eS1y	AT4G34670	AE	S3Ae	–	–	–	–	–	–
eS1z	AT3G04840		S3Ae						
eS4x	AT5G58420	AE	RPS4A	–	–	–	–	–	–
eS4y	AT5G07090		RPS4A						
eS4z	AT2G17360		RPS4A						
eS6y	AT5G10360	AE	RPS6B, EMB3010	–	–	–	–	–	–
eS6z	AT4G31700		RPS6A, RPS6						
eS7x	AT5G16130	E	S7e	–	–	–	–	–	–
eS7y	AT3G02560		S7e						
eS7z	AT1G48830		S7e						
eS8y	AT5G59240	AE	S8e	–	–	–	–	–	–
eS8z	AT5G20290		S8e						
eS10x	AT5G52650	E	S10 domain-containing	–	–	–	–	–	–
eS10y	AT5G41520		S10E B, RPS10B						
eS10z	AT4G25740		S10 domain-containing						
eS12y	AT2G32060	E	L7Ae/L30e/S12e/Gadd45	–	–	–	–	–	–
eS12z	AT1G15930		L7Ae/L30e/S12e/Gadd45						
eS17w	AT5G04800	AE	S17	–	–	–	–	–	–
eS17x	AT3G10610		S17						
eS17y	AT2G05220		S17						
eS17z	AT2G04390		S17, DS17						
eS19x	AT5G61170	AE	S19e	–	–	–	–	–	–
eS19y	AT5G15520		S19e						
eS19z	AT3G02080		S19e						
eS21y	AT5G27700	E	RPS21C, EVR1L1	–	–	–	–	–	–
eS21z	AT3G53890		RPS21B, EVR1						
eS24y	AT5G28060	AE	S24e, RPS24B	–	–	–	–	–	–
eS24z	AT3G04920		S24e						
eS25w	AT4G39200	AE	S25	–	–	–	–	–	–
eS25x	AT4G34555		S25						
eS25y	AT2G21580		S25						
eS25z	AT2G16360		S25						
eS26x	AT3G56340	E	RPS26E	–	–	–	–	–	–
eS26y	AT2G40590		S26E						
eS26z	AT2G40510		S26E						
eS27w	AT5G47930	AE	Zn-binding ribosomal protein	–	–	–	–	–	–
eS27x	AT3G61111		Zn-binding ribosomal protein						
eS27y	AT3G61110		RS27A						
eS27z	AT2G45710		Zn-binding ribosomal protein						
eS28x	AT5G64140	AE	RPS28	–	–	–	–	–	–
eS28y	AT5G03850		OB-fold-like						
eS28z	AT3G10090		OB-fold-like						

⁽¹⁾ Pre- and suffixes: b: bacterial, e: eukaryotic, u: universal, m: mitochondrial, c: chloroplast

Suffixes z/y/x/w/v/... are used to distinguish paralogues. The corresponding locus IDs for *Arabidopsis thaliana* (starting with AT...) are also indicated.

⁽²⁾ Evolutionary occurrence: B: Bacteria, A: Archaea, E: Eukaryotes, m: Mitochondria, c: Chloroplasts

⁽³⁾ Some of the old names may be used in parallel if the protein performs an established extraribosomal function.

Table 2a (continued): New nomenclature for proteins of the plant small ribosomal subunits (including ribosomes from organelles).

Plant cytoplasmic ribosome New name ⁽¹⁾		Occurrence ⁽²⁾	Plant cytoplasmic ribosome Old name ⁽³⁾	Plant mitochondrial ribosome New name ⁽¹⁾		Plant mitochondrial ribosome Old name ⁽³⁾	Plant chloroplast ribosome New name ⁽¹⁾		Plant chloroplast ribosome Old name ⁽³⁾
eS30x eS30y eS30z	AT5G56670 AT4G29390 AT2G19750	AE	S30 S30 S30	-	-	-	-	-	-
eS31x eS31y eS31z	AT3G62250 AT2G47110 AT1G23410	AE	UBQ5 UBQ6 S27a	-	-	-	-	-	-
eS32v ⁽⁴⁾ eS32w eS32x eS32y eS32z	AT3G56020 AT3G11120 AT3G08520 AT2G40205 AT1G56045	AE	L41 L41 L41 L41 L41	-	-	-	-	-	-
RACK1x RACK1y RACK1z	AT3G18130 AT1G48630 AT1G18080	E	RACK1C RACK1B RACK1A, ATARCA, SAC53	-	-	-	-	-	-
-	-	m	-	mS22	AT1G64600	Cu-binding, methyltransferase	-	-	-
-	-	m	-	mS23	AT1G26750	hypothetical protein	-	-	-
-	-	m	-	mS26	AT5G49210	NST1-like, mRPX	-	-	-
-	-	m	-	mS29	AT1G16870	S29-like protein	-	-	-
-	-	m	-	mS33	AT5G44710	S27	-	-	-
-	-	m	-	mS34	AT5G52370	S34	-	-	-
-	-	m	-	mS35y mS35z	AT4G21460 AT3G18240	S24/S35 S24/S35	-	-	-
-	-	m	-	mS37	AT1G47278	hypothetical protein	-	-	-
-	-	m	-	mS38	AT5G63150	hypothetical protein	-	-	-
-	-	m	-	mS41	AT5G26800	xaa-pro aminopeptidase P	-	-	-
-	-	-	-	[mS46] ⁽⁵⁾	n/d				
-	-	m	-	mS47	AT4G31810	CHY4	-	-	-
-	-	m	-	mS75 ⁽⁶⁾	AT5G62270	L20, GCD1	-	-	-
-	-	m	-	mS76 (rPPR1)	AT1G61870	RPPR1	-	-	-
-	-	m	-	mS77 (rPPR2)	AT1G19520	RPPR2, NFD5	-	-	-
-	-	m	-	mS78 (rPPR3a)	AT1G55890	RPPR3A	-	-	-
-	-	m	-	mS79 (rPPR3b)	AT3G13160	RPPR3B	-	-	-
-	-	m	-	mS80 (rPPR6)	AT3G02650	RPPR6, TPR-like	-	-	-
-	-	m	-	mS81 (rPPR8)	AT5G15980	RPPR8	-	-	-
-	-	m	-	mS83 (rPPR10)	AT4G15640	RPPR10, adenylyl cyclase	-	-	-
-	-	m	-	mS85	AT1G53645	hydroxyproline-rich glycoprotein	-	-	-
-	-	m	-	mS86	AT1G18630	RBGA1	-	-	-
-	-	c	-	-	-	-	cS22	AT3G52150	PSRP2
-	-	c	-	-	-	-	cS23y cS23z	AT5G15760 AT1G68590	PSRP3/2, YCF65 PSRP3/1, YCF65

⁽¹⁾ Pre- and suffixes: b: bacterial, e: eukaryotic, u: universal, m: mitochondrial, c: chloroplast

Suffixes z/y/x/w/v/...are used to distinguish paralogues. The corresponding locus IDs for *Arabidopsis thaliana* (starting with AT...) are also indicated.

⁽²⁾ Evolutionary occurrence: B: Bacteria, A: Archaea, E: Eukaryotes, m: Mitochondria, c: Chloroplasts

⁽³⁾ Some of the old names may be used in parallel if the protein performs an established extraribosomal function.

⁽⁴⁾ Found associated with the small subunit in all recent ribosomal cryo-EM structures including animals, plants, fungi, most protozoa and some archaea, therefore renamed from eL41 to eS32.

⁽⁵⁾ A currently unassigned protein occupies the same position as mammalian mS31 and yeast mS46.

⁽⁶⁾ mS75 occupies the same position as mS45 in mammals and adopts a related fold, but on sequence level they are not evolutionary closely related and therefore named differently (renaming is being discussed).

Table 2b: New nomenclature for proteins of the plant large ribosomal subunits (including ribosomes from organelles).

Plant cytoplasmic ribosome New name ⁽¹⁾		Occurrence ⁽²⁾	Plant cytoplasmic ribosome Old name ⁽³⁾	Plant mitochondrial ribosome New name ⁽¹⁾		Plant mitochondrial ribosome Old name ⁽³⁾		Plant chloroplast ribosome New name ⁽¹⁾		Plant chloroplast ribosome Old name ⁽³⁾	
uL1x uL1y uL1z	AT5G22440 AT2G27530 AT1G08360	BAE m c	L1p/L10e L10aP, PGY1 L1p/L10e	uL1m	AT2G42710	L1p/L10e		uL1c	AT3G63490	PRPL1, EMB3126	
uL2x uL2y uL2z	AT4G36130 AT3G51190 AT2G18020	BAE m c	L2 L2 L2, EMB2296	uL2m[y] ⁽⁴⁾ uL2m[z] ⁽⁴⁾	AT2G44065 ATMG00560	L2, C-terminus L2, N-terminus		uL2Cy uL2Cz	ATCG01310 ATCG00830	RPL2.2 RPL2.1	
uL3y uL3z	AT1G61580 AT1G43170	BAE m c	RPL3B RPL3A, EMB2207, RP1	uL3m	AT3G17465	RPL3P		uL3c	AT2G43030	PRPL3	
uL4y uL4z	AT5G02870 AT3G09630	BAE m c	L4/L1, RPL4 L4/L1, SAC56	uL4m	AT2G20060	L4/L1		uL4c	AT1G07320	PRPL4, EMB2784	
uL5w uL5x uL5y uL5z	AT5G45775 AT4G18730 AT3G58700 AT2G42740	BAE m c	L5P RPL16B L5P RPL16A	uL5m	ATMG00210	MRPL5		uL5c	AT4G01310	PRPL5	
uL6x uL6y uL6z	AT4G10450 AT1G33140 AT1G33120	BAE m c	L6 L9, PGY2 L6	uL6m	AT2G18400	L6		uL6c	AT1G05190	RPL6, EMB2394	
–	–	B m c	–	bL9m	AT5G53070	L9		bL9c	AT3G44890	RPL9, CL9	
uL10x uL10y uL10z	AT3G11250 AT3G09200 AT2G40010	BAE m c	L10 L10 L10	uL10m	AT3G12370	L10		uL10c	AT5G13510	L10, EMB3136	
uL11x uL11y uL11z	AT5G60670 AT3G53430 AT2G37190	BAE m c	L11, RPL12C L11 L11	uL11m	AT4G35490	MRPL11		uL11c	AT1G32990	PRPL11	
–	–	B m c	–	bL12mx bL12my bL12mz	AT4G37660 AT3G06040 AT1G70190	L12 L12 L7/L12		bL12cx bL12cy bL12cz	AT3G27850 AT3G27840 AT3G27830	RPL12-C RPL12-B RPL12-A	
uL13w uL13x uL13y uL13z	AT5G48760 AT4G13170 AT3G24830 AT3G07110	BAE m c	L13 L13 L13 L13	uL13m	AT3G01790	L13		uL13c	AT1G78630	L13, EMB1473	
uL14x uL14y uL14z	AT1G04480 AT3G04400 AT2G33370	BAE m c	L14p/L23e L14p/L23e, emb2171 L14p/L23e	uL14m	AT5G46160	L14p/L23e		uL14c	ATCG00780	RPL14	
uL15x uL15y uL15z	AT1G70600 AT1G23290 AT1G12960	BAE m c	L18e/L15 RPL27AB L18e/L15	uL15m	AT5G64670	L18e/L15		uL15c	AT3G25920	RPL15	
uL16x uL16y uL16z	AT1G66580 AT1G26910 AT1G14320	BAE m c	RPL10C, SAG24 RPL10B, L16p/L10 RPL10A, SAC52	uL16m	ATMG00080	MRPL16		uL16c	ATCG00790	RPL16	
–	–	B m c	–	bL17my bL17mz	AT5G64650 AT5G09770	L17 L17		bL17c	AT3G54210	PRPL17	
uL18y uL18z	AT5G39740 AT3G25520	BAE m c	RPL5B, OLI7 RPL5A, OLI5, PGY3, ATL5	uL18m	AT5G27820	L18p/L5e		uL18c	AT1G48350	L18p/L5e, EMB3105	
–	–	B m c	–	bL19m	AT1G24240	L19		bL19cy bL19cz	AT5G47190 AT4G17560	PRPL19 L19	
–	–	B m c	–	bL20m	AT1G16740	L20		bL20c	ATCG00660	RPL20	
–	–	B m c	–	bL21m	AT4G30930	RPL21M, NFD1		bL21c	AT1G35680	RPL21C	
uL22y uL22z	AT1G67430 AT1G27400	BAE m c	L22p/L17e L22p/L17e	uL22my uL22mz	AT4G28360 AT1G52370	L22p/L17e L22p/L17e		uL22c	ATCG00810	RPL22	
uL23y uL23z	AT3G55280 AT2G39460	BAE m c	RPL23AB, RPL23A2 RPL23AA, RPL23A1	uL23m	AT4G39880	L23/L15e		uL23cy uL23cz	ATCG01300 ATCG00840	RPL23.2 RPL23.1	
uL24y uL24z	AT5G67510 AT3G49910	BAE m c	SH3-like SH3-like	uL24m	AT5G23535	KOW domain- containing		uL24c	AT5G54600	RPL24, SVR8	
–	–	B m c	–	bL25my bL25mz	AT5G66860 AT4G23620	L25 L25		–	–	–	
–	–	B m c	–	bL27m	AT2G16930	L27		bL27c	AT5G40950	RPL27	
–	–	B m c	–	bL28m	AT4G31460	L28		bL28c	AT2G33450	PRPL28	
uL29w uL29x uL29y uL29z	AT5G02610 AT3G55170 AT2G39390 AT3G09500	BAE m c	L29 L29 L29 L29	uL29m	AT1G07830	L29		uL29c	AT5G65220	PRPL29	
uL30w uL30x uL30y uL30z	AT3G13580 AT2G44120 AT2G01250 AT1G80750	BAE m	L30/L7 L30/L7 RPL7B RPL7A	uL30m	AT5G55140	L30		–	–	–	
–	–	B m c	–	bL31my	AT5G55125	L31		bL31c	AT1G75350	L31, EMB2184	
–	–	B m c	–	bL32m	AT1G26740	L32p		bL32c	ATCG01020	RPL32	
–	–	B m c	–	bL33m	AT5G18790	L33		bL33c	ATCG00640	RPL33	
–	–	B m c	–	–	–	–		bL34c	AT1G29070	PRPL34	
–	–	B m c	–	bL35m	AT5G45590	L35		bL35c	AT2G24090	PRPL35	
–	–	B m c	–	bL36m	AT5G20180	L36		bL36c	ATCG00760	RPL36	
eL6x eL6y eL6z	AT1G74050 AT1G74060 AT1G18540	E	L6 L6 L6	–	–	–		–	–	–	
eL8y eL8z	AT3G62870 AT2G47610	AE	L7Ae/L30e/S12e/Gadd45 L7Ae/L30e/S12e/Gadd45	–	–	–		–	–	–	
eL13x eL13y eL13z	AT5G23900 AT3G48960 AT3G49010	AE	L13e L13e L13, BBC1, RSU2	–	–	–		–	–	–	
eL14y eL14z	AT4G27090 AT2G20450	AE	L14 L14	–	–	–		–	–	–	
eL15y eL15z	AT4G17390 AT4G16720	AE	L23/L15e L23/L15e	–	–	–		–	–	–	
eL18x eL18y eL18z	AT5G27850 AT3G05590 AT2G47570	AE	L18e/L15, RPL18C L18, RPL18 L18	–	–	–		–	–	–	
eL19x eL19y eL19z	AT1G02780 AT4G022 AT3G16780	AE	L19e L19e L19e, RPL19B	–	–	–		–	–	–	
eL20w ⁽⁵⁾ eL20x eL20y eL20z	AT1G29965 AT3G14600 AT2G34480 AT1G29970	AE	L18ae/LX L18ae/LX L18ae/LX, L18AB L18A-1, RPL18AA	–	–	–		–	–	–	

⁽¹⁾ Pre- and suffixes: b: bacterial, e: eukaryotic, u: universal, m: mitochondrial, c: chloroplast

Suffixes z/y/x/w/v/...are used to distinguish paralogues. The corresponding locus IDs for *Arabidopsis thaliana* (starting with AT...) are also indicated.

⁽²⁾ Evolutionary occurrence: B: Bacteria, A: Archaea, E: Eukaryotes, m: Mitochondria, c: Chloroplasts

⁽³⁾ Some of the old names may be used in parallel if the protein performs an established extraribosomal function.

⁽⁴⁾ These two loci represent a split gene encoding for non-overlapping N- and C-terminal halves of uL2m and are not paralogs. The gene splitting event did not occur in all plants (as exemplified by *Oryza sativa*, which harbors a single non-split uL2m gene).

⁽⁵⁾ Protein LX in Archaea.

Table 2b (continued): New nomenclature for proteins of the plant large ribosomal subunits (including ribosomes from organelles).

Plant cytoplasmic ribosome New name ⁽¹⁾		Occurrence ⁽²⁾	Plant cytoplasmic ribosome Old name ⁽³⁾	Plant mitochondrial ribosome New name ⁽¹⁾		Plant mitochondrial ribosome Old name ⁽³⁾	Plant chloroplast ribosome New name ⁽¹⁾		Plant chloroplast ribosome Old name ⁽³⁾
eL21w eL21x eL21y eL21z	AT1G57860 AT1G57660 AT1G09690 AT1G09590	AE	SH3-like SH3-like SH3-like SH3-like	-	-	-	-	-	-
eL22x eL22y eL22z	AT1G02830 AT5G27770 AT3G05560	E	L22e L22e L22e	-	-	-	-	-	-
eL24x eL24y eL24z	AT2G44860 AT3G53020 AT2G36620	AE	L24e RPL24B RPL24A	-	-	-	-	-	-
eL27x eL27y eL27z	AT4G15000 AT3G22230 AT2G32220	E	L27e L27e L27e	-	-	-	-	-	-
eL28y eL28z	AT4G29410 AT2G19730	E	L28e L28e	-	-	-	-	-	-
eL29y eL29z	AT3G06680 AT3G06700	E	L29e L29e	-	-	-	-	-	-
eL30x eL30y eL30z	AT3G18740 AT1G77940 AT1G36240	AE	RLK902 L7Ae/L30e/S12e/Gadd45 L7Ae/L30e/S12e/Gadd45	-	-	-	-	-	-
eL31x eL31y eL31z	AT5G56710 AT4G26230 AT2G19740	AE	L31e L31e L31e	-	-	-	-	-	-
eL32y eL32z	AT5G46430 AT4G18100	AE	L32e L32e	-	-	-	-	-	-
eL33w eL33x eL33y eL33z	AT1G07070 AT3G55750 AT1G74270 AT1G41880	AE	L35Ae L35Ae L35Ae L35Ae	-	-	-	-	-	-
eL34x eL34y eL34z	AT3G28900 AT1G69620 AT1G26880	AE	L34e RPL34 L34e	-	-	-	-	-	-
eL36x eL36y eL36z	AT5G02450 AT3G53740 AT2G37600	E	L36e L36e L36e	-	-	-	-	-	-
eL37x eL37y eL37z	AT3G16080 AT1G52300 AT1G15250	AE	Zn-binding ribosomal protein Zn-binding ribosomal protein Zn-binding ribosomal protein	-	-	-	-	-	-
eL38y eL38z	AT3G59540 AT2G43460	AE	L38e L38e	-	-	-	-	-	-
eL39x eL39y eL39z	AT4G31985 AT3G02190 AT2G25210	AE	L39 L39 L39	-	-	-	-	-	-
eL40y eL40z	AT3G52590 AT2G36170	AE	UBQ1, EMB2167, ERD16, HAP4 UBQ2, L40-1, RPL40A	-	-	-	-	-	-
eL42y eL42z	AT4G14320 AT3G23390	AE	RPL36AB RPL36AA	-	-	-	-	-	-
eL43y eL43z	AT3G60245 AT3G10950	AE	Zn-binding ribosomal protein Zn-binding ribosomal protein	-	-	-	-	-	-
P1w P1x P1y P1z	AT1G01100 AT5G24510 AT5G47700 AT4G00810	AE	RPP1 60S acidic ribosomal protein RPP1C RPP1B	-	-	-	-	-	-
P2v P2w P2x P2y P2z	AT5G40040 AT3G44590 AT3G28500 AT2G27710 AT2G27720	AE	60S acidic ribosomal protein 60S acidic ribosomal protein 60S acidic ribosomal protein 60S acidic ribosomal protein 60S acidic ribosomal protein	-	-	-	-	-	-
P3y P3z	AT5G57290 AT4G25890	AE	P3B, ATP3B 60S acidic ribosomal protein	-	-	-	-	-	-
-	-	m	-	mL40	AT4G05400	Cu-binding protein	-	-	-
-	-	m	-	mL41y mL41z	AT5G40080 AT5G39800	MRPL27 MRPL27	-	-	-
-	-	m	-	mL43	AT3G59650	MRPL51/S25/CI-B8	-	-	-
-	-	m	-	mL46	AT1G14620	DECOY	-	-	-
-	-	m	-	mL53	AT5G39600	39S ribosomal protein	-	-	-
-	-	m	-	mL54	AT3G01740	MRPL37	-	-	-
-	-	m	-	bL31mz ⁽⁶⁾	AT1G27435	hypothetical protein	-	-	-
-	-	m	-	mS82 ⁽⁷⁾	AT4G22000	tyrosin sulfo-transferase-like	-	-	-
-	-	m	-	mL101 (rPPR4)	AT1G60770	RPPR4	-	-	-
-	-	m	-	mL102 (rPPR5)	AT2G37230	RPPR5	-	-	-
-	-	m	-	mL103 (rPPR7)	AT4G36680	RPPR7	-	-	-
-	-	m	-	mL104 (rPPR9)	AT5G60960	RPPR9, PNM1	-	-	-
-	-	m	-	mL105 ⁽⁸⁾	AT3G51010	Protein translocase subunit, mL87	-	-	-
-	-	m	-	mL106 ⁽⁹⁾	AT1G73940	TNF-like, mL80	-	-	-
-	-	c	-	-	-	-	cL37	AT3G56910	PSRP5
-	-	c	-	-	-	-	cL38	AT5G17870	PSRP6

⁽¹⁾ Pre- and suffixes: b: bacterial, e: eukaryotic, u: universal, m: mitochondrial, c: chloroplast

Suffixes z/y/x/w/v/... are used to distinguish paralogues. The corresponding locus IDs for *Arabidopsis thaliana* (starting with AT...) are also indicated.

⁽²⁾ Evolutionary occurrence: B: Bacteria, A: Archaea, E: Eukaryotes, m: Mitochondria, c: Chloroplasts

⁽³⁾ Some of the old names may be used in parallel if the protein performs an established extraribosomal function.

⁽⁶⁾ N-terminus including first helix found in similar orientation and direction as in mammalian mL63 and yeast mL60, but on sequence level not evolutionarily related. No sequence homology to bL31y, therefore not a paralog (adequate renaming is being discussed).

⁽⁷⁾ Currently wrongly assigned as SSU protein. C-terminal helix in similar orientation and direction as in mammalian mL64 and yeast mL59 (adequate renaming is being discussed).

⁽⁸⁾ Named differently in the suggested new plant nomenclature (mL105) (Scarpin et al, 2022) and the EM structure (mL87) (Waltz et al 2020) (unique name is being discussed).

⁽⁹⁾ Named differently in the suggested new plant nomenclature (mL106) (Scarpin et al, 2022) and the EM structure (mL80) (Waltz et al 2020) (unique name is being discussed).