

Supplementary Table 1. Known eukaryotic P-body protein components

Species	Gene_ID	Uniprot_Ac	Name	Alias	Reference
Arabidopsis	837357	Q9SJF3	DCP1		(Xu et al. 2006)
Arabidopsis	831201	Q8GW31	DCP2		(Xu et al. 2006)
Arabidopsis	820530	Q9LTT8	VCS	EDC4, GE-1	(Xu et al. 2006)
C. elegans	181719	Q17740	AIN-1	GW182	(Ding et al. 2005)
C. elegans	181504	Q20578	ALG-1		(Ding et al. 2005)
C. elegans	175680	Q21992	LARP-1		(Nykamp et al. 2008)
C. elegans	175654	Q19818	NHL-2		(Hammell et al. 2009)
C. elegans	174808	Q20374	PATR-1	Pat1	(Gallo et al. 2008)
Drosophila	36544	Q32KD4	AGO1		(Eulalio et al. 2009)
Drosophila	33934	Q9VMA3	Cup		(Lee et al. 2009a)
Drosophila	39957	Q9VVI2	EDC3		(Tritschler et al. 2007)
Drosophila	37528	Q9NFU0	FMRP		(Barbee et al. 2006)
Drosophila	43808	Q8SY33	GW182	Gawky Dhh1,	(Eulalio et al. 2009)
Drosophila	34364	P23128	Me31B	RCK/P54	(Lin et al. 2006)
Drosophila	32926	Q9V3F9	Out		(Lee et al. 2009a)
Drosophila	37065	P25159	Staufen		(Barbee et al. 2006)
Drosophila	39430	Q9VTZ0	Tral	RAP55, LSM14A	(Tritschler et al. 2008)
Human	26523	Q9UL18	Ago1	EIF2C1	(Sen and Blau 2005)
Human	27161	Q9UKV8	Ago2	EIF2C2	(Sen and Blau 2005)
Human	192669	Q9H9G7	Ago3	EIF2C3	(Azuma-Mukai et al. 2008)
Human	192670	Q9HCK5	Ago4	EIF2C4	(Lazzaretti et al. 2009)
Human	84962	Q96IF1	Ajuba		(James et al. 2010)
Human	200316	Q8IU4	APOBEC3F		(Wichroski et al. 2006)
Human	60489	Q9HC16	APOBEC3G		(Wichroski et al. 2006)
Human	29883	Q9UIV1	Caf1	CNOT7	(Zheng et al. 2008)
Human	57472	Q9ULM6	Ccr4	CNOT6	(Cougot et al. 2004)
Human	64506	Q9BZB8	CPEB1		(Wilczynska et al. 2005)
Human	55802	Q9NPI6	Dcp1a		(Kedersha et al. 2005)
Human	196513	Q8IZD4	Dcp1b		(Cougot et al. 2004)
Human	167227	Q8IU60	Dcp2		(van Dijk et al. 2002)
Human	80153	Q96F86	Edc3	LSM16	(Ling et al. 2008)
Human	1977	P06730	eIF4E		(Andrei et al. 2005)
Human	56478	Q9NRA8	eIF4E-T	EIF4ENIF1	(Andrei et al. 2005)
Human	10922	Q14296	FAST	FASTK	(Kedersha et al. 2005)
Human	23644	Q6P2E9	Ge-1	EDC4, HEDLS	(Yu et al. 2005)
Human	25929	Q8TEQ6	Gemin5		(Fierro-Monti et al. 2006)
Human	220988	P51991	hnRNP A3		(Katahira et al. 2008)
Human	3064	P42858	Htt		(Savas et al. 2008)
Human	10526	O15397	Imp8	IPO8	(Weinmann et al. 2009)
Human	8994	Q9UGP4	LIMD1		(James et al. 2010)
Human	79727	Q9H9Z2	Lin28	ZCCHC1	(Balzer and Moss 2007)
Human	27257	O15116	LSm1		(Ingelfinger et al. 2002)
Human	57819	Q9Y333	LSm2		(Ingelfinger et al. 2002)
Human	27258	P62310	LSm3		(Ingelfinger et al. 2002)
Human	25804	Q9Y4Z0	LSm4		(Ingelfinger et al. 2002)
Human	23658	Q9Y4Y9	LSm5		(Ingelfinger et al. 2002)

Human	11157	P62312	LSm6		(Ingelfinger et al. 2002)
Human	51690	Q9UK45	LSm7		(Ingelfinger et al. 2002)
Human	92312	A1L020	Mex-3A		(Buchet-Poyau et al. 2007)
Human	84206	Q6ZN04	Mex-3B		(Buchet-Poyau et al. 2007)
Human	4343	Q9HCE1	MOV10		(Meister et al. 2005)
Human	340152	A2A288	P58(TFL)		(Minagawa et al. 2009)
Human	9924	Q504Q3	Pan2	USP52	(Zheng et al. 2008)
Human	255967	Q58A45	Pan3		(Zheng et al. 2008)
Human	219988	Q86TB9	PatL1		(Scheller et al. 2007)
Human	5093	Q15365	PCBP1	HNRPE1	(Fujimura et al. 2009)
Human	5094	Q15366	PCBP2	HNRPE2	(Fujimura et al. 2008)
Human	5610	P19525	PKR		(Hebner et al. 2006)
Human	55629	Q9NPJ4	PNRC2		(Cho et al. 2009)
Human	26065	Q8ND56	RAP55	LSM14A	(Yang et al. 2006)
Human	1656	P26196	RCK/p54	DDX6	(Chu and Rana 2006)
Human	6737	P19474	Ro52	SSA1	(Yamochi et al. 2008)
Human	23381	Q9UPR3	SMG5		(Unterholzner and Izaurralde 2004)
Human	23293	Q86US8	SMG6		(Durand et al. 2007)
Human	9887	Q92540	SMG7		(Unterholzner and Izaurralde 2004)
Human	27327	Q8NDV7	TNRC6A	GW182	(Takimoto et al. 2009)
Human	23112	Q9UPQ9	TNRC6B		(Takimoto et al. 2009)
Human	57690	Q9HCJ0	TNRC6C		(Baillat and Shiekhatar 2009)
Human	10766	Q14106	Tob2		(Ezzeddine et al. 2007)
Human	3842	Q92973	TNPO1	TRN Tis11, Zfp36	(Chang and Tarn 2009)
Human	7538	P26651	TTP		(Chang and Tarn 2009)
Human	5976	Q92900	UPF1		(Unterholzner and Izaurralde 2004)
Human	65110	Q9H1J1	UPF3a		(Durand et al. 2007)
Human	65109	Q9BZI7	UPF3b		(Durand et al. 2007)
Human	126374	A6NIX2	WTIP		(James et al. 2010)
Human	54464	Q8IZH2	Xrn1		(Ingelfinger et al. 2002)
Human	4904	P67809	YB-1	YBX1	(Yang and Bloch 2007)
Mouse	83675	Q99MQ1	Bicc1		(Tran et al. 2010)
Mouse	15572	Q61701	HuD	Elavl4	(Blumenthal and Ginzburg 2008)
Mouse	232943	Q91W40	KLC3		(Chung et al. 2007)
Mouse	83557	Q8K3Y3	Lin28		(Balzer and Moss 2007)
Mouse	636931	Q1PSW8	mLin41		(Rybak et al. 2009)
Mouse	378430	P60322	Nanos2		(Suzuki et al. 2010)
Mouse	244551	P60324	Nanos3		(Yamaji et al. 2010)
Mouse	170722	Q80SZ6	NXF7		(Katahira et al. 2008)
Mouse	22695	P22893	TTP	Tis11, Zfp36	(Kedersha et al. 2005)
Mouse	317755	Q80SU3	Zar1		(Hu et al. 2010)
Mouse	545824	C3VD30	Zar1L		(Hu et al. 2010)
Yeast	854016	Q12517	Dcp1p		(Sheth and Parker 2003)
Yeast	855605	P53550	Dcp2p		(Sheth and Parker 2003)
Yeast	854344	Q12123	Dcs2		(Malys and McCarthy 2006)
Yeast	854379	P06634	Ded1p		(Beckham et al. 2008)
Yeast	851394	P39517	Dhh1p		(Sheth and Parker 2003)
Yeast	851787	Q03466	Ebs1p		(Luke et al. 2007)
Yeast	856700	P39998	Ede3p	LSM16	(Kshirsagar and Parker 2004)
Yeast	853318	P47017	Lsm1p		(Sheth and Parker 2003)
Yeast	854504	P19524	Myo2p		(Chang et al. 2008)
Yeast	850455	P25655	Not1p		(Muhlrad and Parker 2005)

Yeast	851389	P06100	Not2p		(Muhlrad and Parker 2005)
Yeast	854773	P06102	Not3p		(Muhlrad and Parker 2005)
Yeast	856799	P34909	Not4p		(Muhlrad and Parker 2005)
Yeast	850440	P25644	Pat1p		(Sheth and Parker 2003)
Yeast	852391	P38254	Phy1p		(Sweet et al. 2007)
Yeast	855788	P39008	Pop2p		(Teixeira and Parker 2007)
Yeast	850647	Q07807	Puf3p		(Lee et al. 2009b)
Yeast	852513	P32831	Rbp1p	Ngr1p	(Jang et al. 2006)
Yeast	853301	P20433	Rpb4p		(Lotan et al. 2005)
Yeast	852013	P34087	Rpb7p		(Lotan et al. 2007)
Yeast	854883	Q02773	Rpm2p		(Stribinskis and Ramos 2007)
Yeast	856351	P10080	Sbp1p		(Segal et al. 2006)
Yeast	1466445	Q6WNK7	Sus1		(Cuenca-Bono et al. 2010)
Yeast	855898	P06245	Tpk2		(Tudisca et al. 2009)
Yeast	853688	P05986	Tpk3		(Tudisca et al. 2009)
Yeast	854889	P09733	Tub1		(Sweet et al. 2007)
Yeast	855104	P30771	Upf1p		(Sheth and Parker 2006)
Yeast	856476	P38798	Upf2p		(Sheth and Parker 2006)
Yeast	852963	P48412	Upf3p		(Sheth and Parker 2006)
Yeast	854541	Q08831	Vts1p		(Rendl et al. 2008)
Yeast	852702	P22147	Xrn1p	Kem1p	(Sheth and Parker 2003)

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