

Table S2. List of purified proteins identified by mass spectrometry analysis. Proteins are listed in a decreasing order according to the number of independent peptides identified from each protein.

Protein Description	Gene Name	Swissprot Accession Number	Molecular Weight	Unique Peptides
Putative uncharacterized protein (99% similarity with mouse GTF2I)	GTF2I	Q3UHU8	108 kDa	49
DNA topoisomerase 2-beta	TOP2B	Q64511	182 kDa	35
Vimentin	VIM	P20152	54 kDa	34
Putative uncharacterized protein (Heterogeneous nuclear ribonucleoprotein U)	HNRNPU	Q3TVV6	88 kDa	33
Putative uncharacterized protein (Poly(ADP-ribose) polymerase-1)	PARP1	Q3TX36	113 kDa	31
DNA mismatch repair protein Msh2	MSH2	P43247	104 kDa	27
Splicing factor proline/glutamine rich (Polypyrimidine tract binding protein associated)	SFPQ	Q4KM71	75 kDa	21
MutS homolog 3 (E. coli)	MSH3	B2RWY6	123 kDa	18
Actin, cytoplasmic 1	ACTB	P48975	42 kDa	17
DEAD (Asp-Glu-Ala-Asp) box polypeptide 5	DDX5	A1L333	69 kDa	17
Putative uncharacterized protein ((Heterogeneous nuclear ribonucleoprotein M)	HNRNPM	Q3TW40	74 kDa	17
ATP-dependent RNA helicase A	DHX9	O70133	149 kDa	17
Alpha-internexin	INA	P46660	56 kDa	15
Superkiller viralicidic activity 2-like 2	SKIV2L2	Q9CZU3	118 kDa	15
Putative uncharacterized protein (Non-POU domain-containing octamer-binding protein)	NONO	Q3TFC2	54 kDa	14
Elongation factor Tu GTP binding domain containing 2	EFTUD2	A2AH85	109 kDa	13
Heat shock cognate 71 kDa protein	HSPA8	P19378	71 kDa	13
Thymopoiectin	TMPO	B2RUB9	75 kDa	13
DEAD (Asp-Glu-Ala-Asp) box polypeptide 21	DDX21	Q3TVJ3	94 kDa	12
ATP-dependent DNA helicase 2 subunit 2	XRCC5	P27641	83 kDa	11
Putative uncharacterized protein (Pre-mRNA-processing factor 6)	PRPF6	Q3ULJ7	107 kDa	11
Putative uncharacterized protein (Matrin 3)	MATR3	Q3TTX0	95 kDa	10
40S ribosomal protein S3	RPS3	P62908	27 kDa	10
Putative uncharacterized protein (DEAD (Asp-Glu-Ala-Asp) box polypeptide 17)	DDX17	Q3U741	73 kDa	9
Tubulin beta-5 chain	TUBB5	P69893	50 kDa	9
Splicing factor 3B subunit 3	SF3B3	Q921M3	136 kDa	9
SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 5	SMARCA5	Q91ZW3	122 kDa	9
AIF-C1 (Heterogeneous nuclear ribonucleoprotein A/B)	HNRNPAB	O88311	36 kDa	8
Tubulin alpha-1A chain	TUBA1A	P68362	50 kDa	8
DNA topoisomerase II, alpha isozyme	TOP2A	Q01320	173 kDa	8
60S acidic ribosomal protein P0	RPLP0	P14869	34 kDa	8
ATP-dependent RNA helicase DDX3X	DDX3X	Q62167	73 kDa	8
Nuclear factor 90	IIF3	Q45VK5	76 kDa	8
Dhx36 protein	DHX36	B2RQS6	114 kDa	8
Myb-binding protein 1A	MYBBP1A	Q7TPV4	152 kDa	8
RAT Pyruvate carboxylase, mitochondrial	PC	P52873	130 kDa	8
Uncharacterized protein C17orf85 homolog	Unknown	Q8BZR9	70 kDa	7
Histone deacetylase 6	HDAC6	B1AUA6	126 kDa	7
DNA topoisomerase 1	TOP1	Q04750	91 kDa	7
Poly(rC)-binding protein 1	PCBP1	P60335	37 kDa	7
THO complex subunit 1	THOC1	Q8R3N6	75 kDa	7
Methylcrotonoyl-CoA carboxylase subunit alpha, mitochondrial	MCCC1	Q99MR8	79 kDa	7
Heterogeneous nuclear ribonucleoprotein D0	HNRPD	Q60668	38 kDa	6
THO complex subunit 4	THOC4	O08583	27 kDa	6
Histone H1.2	HIST1H1C	P15864	21 kDa	6
Putative uncharacterized protein (RNA binding motif protein X chromosome retrogene)	RBMXRT	Q91VM5	42 kDa	6
Heterogeneous nuclear ribonucleoprotein K	HNRNPK	B2M1R6	49 kDa	6
RNA-binding protein 14	RBM14	Q8C2Q3	69 kDa	6
Putative uncharacterized protein (Heterogeneous nuclear ribonucleoprotein R)	HNRNPR	Q3U8W9	71 kDa	6
Splicing factor 3B subunit 1	SF3B1	Q99NB9	146 kDa	6
Poly(U)-binding-splicing factor PUF60	PUF60	Q3UEB3	60 kDa	6
THO complex 2	THOC2	B1AZI6	183 kDa	6
Polyadenylate-binding protein 1	PABPC1	P29341	71 kDa	6
Myosin-Ib	MYO1B	P46735	129 kDa	6
Putative pre-mRNA-splicing factor ATP-dependent RNA helicase DHX15	DHX15	O35286	91 kDa	6
60S ribosomal protein L6	RPL6	P47911	34 kDa	6
Nucleolar protein 5A	NOL5A	Q9D6Z1	64 kDa	6
Aquarius	AQR	A2AQA7	162 kDa	6
Putative uncharacterized protein (DNA-directed RNA polymerase I subunit RPA1)	RPA1	Q3U8B3	71 kDa	6
Putative uncharacterized protein (RuvB-like 2)	RUVBL2	Q3UXP2	51 kDa	6
60S ribosomal protein L23a	RPL23A	P62751	18 kDa	6

Splicing factor, arginine/serine-rich 1	SFRS1	Q6PDM2	28 kDa	5
Homeobox protein DLX-1	DLX1	Q64317	27 kDa	5
Heterogeneous nuclear ribonucleoprotein H	HNRNPH1	O35737	49 kDa	5
Spliceosome RNA helicase Bat1	BAT1	Q9Z1N5	49 kDa	5
60S ribosomal protein L11	RPL11	Q6QMZ8	20 kDa	5
MKIAA0670 protein (Apoptotic chromatin condensation inducer in the nucleus)	ACIN1	Q80TU6	143 kDa	5
Eukaryotic initiation factor 4A-III	EIF4A3	Q91VC3	47 kDa	5
Guanine nucleotide-binding protein subunit beta-2-like 1	GNB2L1	P68040	35 kDa	5
Cpsf1 protein (Cleavage and polyadenylation specificity factor subunit 1)	CPSF1	B5DEL2	161 kDa	5
DNA ligase 3	LIG3	P97386	113 kDa	5
Upstream binding transcription factor, RNA polymerase I	UBTF	A2AWT5	89 kDa	5
Heat shock protein HSP 90-beta	HSP90AB1	P34058	83 kDa	5
rRNA 2'-O-methyltransferase fibrillarin	FBL	P22509	34 kDa	5
Serine/threonine-protein kinase TAO2	TAOK2	Q6ZQ29	120 kDa	5
Cleavage and polyadenylation specificity factor subunit 2	CPSF2	O35218	88 kDa	5
Putative uncharacterized protein (Splicing factor 3b, subunit 2)	SF3B2	Q3UAI4	98 kDa	5
Putative uncharacterized protein (Splicing factor 3 subunit 1)	SF3A1	Q3TVM1	89 kDa	5
Putative uncharacterized protein (Transcription intermediary factor 1-beta)	TRIM28	Q3UDN8	69 kDa	5
Putative uncharacterized protein (Replication factor C subunit 4)	RFC4	Q3UI84	41 kDa	5
Neurofilament medium polypeptide	NEFM	P08553	96 kDa	5
Nucleophosmin	NPM1	P13084	33 kDa	4
Putative uncharacterized protein (H/ACA ribonucleoprotein complex subunit 1)	GAR1	Q3TKG5	24 kDa	4
Putative uncharacterized protein (Polymerase delta-interacting protein 3)	POLDIP3	Q3TJ78	47 kDa	4
Acetyl-CoA carboxylase 1	ACACA	P11497	265 kDa	4
Regulator of nonsense transcripts 1	RENT1	Q9EPU0	124 kDa	4
Putative uncharacterized protein (Heterogeneous nuclear ribonucleoprotein C)	HNRNPC	Q3U6P5	37 kDa	4
General transcription factor IIIC, polypeptide 4	GTF3C4	Q148Y1	92 kDa	4
Putative uncharacterized protein (Staphylococcal nuclease domain-containing protein 1)	SND1	Q3TW51	102 kDa	4
60S ribosomal protein L4	RPL4	Q9D8E6	47 kDa	4
Paraspeckle component 1	PSPC1	Q4KLH4	59 kDa	4
Myosin regulatory light chain RLC-A	RLC-A	P13832	20 kDa	4
RNA-binding protein 27	RBM27	Q5SFM8	119 kDa	4
Polypyrimidine tract-binding protein 2	PTBP2	Q91Z31	57 kDa	4
RNA binding motif protein 15	RBM15	Q0VBL3	106 kDa	4
Putative uncharacterized protein (Caprin-1)	CAPRIN1	Q3UFZ6	38 kDa	4
RAT Cell division cycle 5-related protein	CDC5L	O08837	92 kDa	4
Activating signal cointegrator 1 complex subunit 3-like 1	SNRNP200	Q6P4T2	245 kDa	4
Nucleolin	NCL	P09405	77 kDa	4
Putative uncharacterized protein (Oligonucleotide/oligosaccharide-binding fold-containing protein 1)	OBFC1	Q3TPH0	43 kDa	4
Laminin receptor	RPSA	B2CY77	33 kDa	3
Putative uncharacterized protein (Interleukin enhancer-binding factor 2)	IIF2	Q3UXI9	43 kDa	3
RNA-binding protein 25	RBM25	B2RY56	100 kDa	3
60S ribosomal protein L12	RPL12	P23358	18 kDa	3
Homeobox protein DLX-5	DLX5	P50575	31 kDa	3
60S ribosomal protein L13	RPL13	P47963	24 kDa	3
Poly(RC) binding protein 2	PCBP2	B2M1R7	40 kDa	3
RNA binding motif protein 39	RBM39	A6QRH4	37 kDa	3
PREDICTED: hypothetical protein	Unknown	UPI0000193CBE	179 kDa	3
Zinc finger CCHC domain-containing protein 8	ZCCHC8	Q9CYA6	78 kDa	3
60S ribosomal protein L7	RPL7	P14148	31 kDa	3
ATP-dependent DNA helicase 2 subunit 1	XRCC6	P23475	69 kDa	3
MutS homolog 6 (E. coli)	MSH6	Q6GTK8	151 kDa	3
Putative uncharacterized protein (Symplekin)	SYMPK	Q3TN10	119 kDa	3
Propionyl-CoA carboxylase alpha chain, mitochondrial	PCCA	Q91ZA3	80 kDa	3
Methylcrotonoyl-CoA carboxylase beta chain, mitochondrial	MCCC2	Q3ULD5	61 kDa	3
Histone H1.1	HIST1H1A	P43275	22 kDa	3
Putative uncharacterized protein (60S ribosomal protein L24)	RPL24	Q3UW40	18 kDa	3
Thyroid hormone receptor-associated protein 3	THRAP3	Q569Z6	108 kDa	3
Nol5 protein (Nucleolar protein 58)	NOL5	Q5PPK6	50 kDa	3
U4/U6.U5 tri-snRNP-associated protein 1	SART1	Q9Z315	91 kDa	3
Splicing factor 3A subunit 3	SF3A3	Q9D554	59 kDa	3
Mta1 protein (Metastasis-associated protein MTA1)	MTA1	Q2KHS8	79 kDa	3

Heterogeneous nuclear ribonucleoprotein F	HNRNPF	Q9Z2X1	46 kDa	3
RuvB-like 1	RUVBL1	P60122	50 kDa	3
ELAV (Embryonic lethal, abnormal vision, Drosophila)-like 1 (Hu antigen R)	ELAV1	B5DF91	36 kDa	3
Prp19 beta protein (Pre-mRNA-processing factor 19)	PRPF19	Q4ADG5	57 kDa	3
Putative uncharacterized protein (Replication factor C subunit 2)	RFC2	Q9D0K3	39 kDa	3
LIM/homeobox protein Lhx2	LHX2	Q9Z0S2	44 kDa	3
Pcid2 protein (PCI domain-containing protein 2)	PCID2	A0JLQ7	47 kDa	3
DEAD (Asp-Glu-Ala-Asp) box polypeptide 50	DDX50	Q5BKP5	82 kDa	3
S1 RNA-binding domain-containing protein 1	SRBD1	Q497V5	114 kDa	3
Ddx23 protein	DDX23	B5DFJ3	93 kDa	3
WD repeat-containing protein 82	WDR82	Q8BFQ4	35 kDa	3
DIM1 dimethyladenosine transferase 1-like (S. cerevisiae)	DIMT1L	B0BN90	35 kDa	3
N-methylpurine-DNA glycosylase	MPG	A2AVE7	36 kDa	3
Ribosomal protein L18	RPL18	Q0QEW6	19 kDa	3
Daxx protein (Death domain-associated protein 6)	DAXX	A1A558	81 kDa	3
Ribosomal protein S8	RPS8	Q5M9L9	24 kDa	3
Far upstream element-binding protein 2	KHSRP	Q99PF5	74 kDa	3
Putative uncharacterized protein (SWI/SNF complex subunit SMARCC2)	SMARCC2	Q3UID0	125 kDa	3
Putative uncharacterized protein (Myelin expression factor 2)	MYEF2	A7UQY4	57 kDa	3
3-alpha,7-alpha,12-alpha-trihydroxy-5-beta-cholest-24-enoyl-CoA hydratase	HSD17B4	P51660	79 kDa	3
Insulin-like growth factor 2 mRNA-binding protein 1	IGF2BP1	O88477	63 kDa	3
DEAH (Asp-Glu-Ala-His) box polypeptide 35	DHX35	A2ACQ1	79 kDa	3
Putative uncharacterized protein (Nuclear RNA export factor 1)	NXF1	Q3TJA5	70 kDa	3
Lysine-specific histone demethylase 1	AOF2	A3KG93	95 kDa	3
Ubiquitin specific protease 39 (Predicted), isoform CRA_b	USP39	B2GV41	65 kDa	3
Keratin, type II cytoskeletal 1	KRT1	Q6IMF3	65 kDa	2
Splicing factor, arginine/serine-rich 3	SFRS3	P84104	19 kDa	2
Mitogen-activated protein kinase kinase kinase kinase 4	MAP4K4	P97820	141 kDa	2
Elongation factor 1-alpha 1	EEF1A1	P10126	50 kDa	2
KH domain-containing, RNA-binding, signal transduction-associated protein 1	KHDRBS1	Q60749	48 kDa	2
ELAV (Embryonic lethal, abnormal vision, Drosophila)-like 4 (Hu antigen D)	ELAVL4	A2A9R6	41 kDa	2
Transcriptional activator protein Pur-beta	PURB	O35295	34 kDa	2
Tubulin beta-2B chain	TUBB2B	Q9CWF2	50 kDa	2
RCG26118, isoform CRA_a	SNRPB	B0BN51	24 kDa	2
Keratin, type II cytoskeletal 73	KRT73	Q6IG03	60 kDa	2
Single-stranded DNA binding protein 3	SSBP3	B1AS36	38 kDa	2
Putative ATP-dependent RNA helicase DHX29	DHX29	Q6PGC1	154 kDa	2
RNA-binding protein FUS	FUS	P56959	53 kDa	2
Ldb1 protein (LIM domain-binding protein 1)	LDB1	B2RYF3	52 kDa	2
Putative uncharacterized protein (TAR DNA binding protein)	TARDBP	Q3U591	45 kDa	2
60S ribosomal protein L10a	RPL10A	P53026	25 kDa	2
Histone H1.5	HIST1H1B	P43276	23 kDa	2
Replication factor C (Activator 1) 5 (Predicted)	RFC5	B5DF29	38 kDa	2
Hdac2 protein (Histone deacetylase 2)	HDAC2	B1WBV8	61 kDa	2
DNA-directed RNA polymerase II subunit RPB2	POLR2B	Q8CFI7	134 kDa	2
Putative uncharacterized protein (ATP-dependent RNA helicase DDX1)	DDX1	Q3V1Z7	83 kDa	2
Putative uncharacterized protein (SMARCA4)	SMARCA4	Q3TKT4	181 kDa	2
Splicing factor, arginine/serine-rich 7	SFRS7	Q8BL97	31 kDa	2
Structural maintenance of chromosomes 1A	SMC1A	A2AFQ5	143 kDa	2
Cell division cycle and apoptosis regulator protein 1	CCAR1	Q8CH18-2	36 kDa	2
Serine/threonine-protein kinase VRK3	VRK3	Q8K3G5	51 kDa	2
Crooked neck-like protein 1	CRNKL1	P63154	83 kDa	2
Pre-mRNA-processing factor 40 homolog A	PRPF40A	Q9R1C7	108 kDa	2
Importin subunit beta-1	KPNB1	P52296	97 kDa	2
Putative uncharacterized protein (Actin-like protein 6A)	ACTL6A	Q3TF62	48 kDa	2
T-complex protein 1 subunit beta	CCT2	P80314	57 kDa	2
Transcriptional activator protein Pur-alpha	PURA	P42669	35 kDa	2
THO complex subunit 5 homolog	THOC5	Q8BKT7	79 kDa	2
Capping protein (Actin filament) muscle Z-line, beta (CAPZB3)	CAPZB	A2AMV7	34 kDa	2
Zfx1b zinc finger homeobox 1b	ZEB2	Q3T921	137 kDa	2
H1 histone family, member X	H1FX	Q80ZM5	20 kDa	2
Tubulin beta-2C chain	TUBB2C	P68372	50 kDa	2

MKIAA1637 protein (Nuclear receptor coactivator 5)	NCOA5	Q69ZE0	39 kDa	2
60S ribosomal protein L14	RPL14	Q9CR57	24 kDa	2
Putative uncharacterized protein (Splicing factor, arginine/serine-rich 6)	SFRS6	Q3TWWW8	39 kDa	2
40S ribosomal protein S7	RPS7	P62082	22 kDa	2
Probable ATP-dependent RNA helicase DDX47	DDX47	Q9CWX9	51 kDa	2
Proline-, glutamic acid- and leucine-rich protein 1	PELP1	Q56B11	119 kDa	2
Transcription factor DLX6	DLX6	A5HKN2	33 kDa	2
Zinc finger protein 768	ZNF768	Q8R0T2	63 kDa	2
PHD finger protein 8	PHF8	Q80TJ7	114 kDa	2
Putative uncharacterized protein (Structural maintenance of chromosomes protein 2)	SMC2	Q3ULS2	139 kDa	2
60S ribosomal protein L3	RPL3	P21531	46 kDa	2
Propionyl-CoA carboxylase beta chain, mitochondrial	PCCB	P07633	59 kDa	2
PHD finger protein 6	PHF6	B1B0W7	51 kDa	2
Bromodomain adjacent to zinc finger domain protein 1A	BAZ1A	O88379	178 kDa	2
POZ (BTB) and AT hook containing zinc finger 1	PATZ1	Q5NBY9	74 kDa	2
DNA-directed RNA polymerases I, II, and III subunit RPABC1	POLR2E	Q80UW8	25 kDa	2
60S ribosomal protein L8	RPL8	P62918	28 kDa	2
Helicase-like transcription factor	HLTF	Q6PCN7	113 kDa	2
RNA-binding protein 26	RBM26	Q6NZN0	114 kDa	2
GC-rich sequence DNA-binding factor homolog	GCFC	P58501	105 kDa	2
Putative uncharacterized protein (General transcription factor IIIC, polypeptide 3)	GTF3C3	Q3TMP1	101 kDa	2
Tropomodulin-2	TMOD2	P70566	39 kDa	2
U4/U6 small nuclear ribonucleoprotein Prp31	PRPF31	Q8CCF0	55 kDa	2
Splicing factor U2AF 65 kDa subunit	U2AF2	P26369	54 kDa	2
40S ribosomal protein S10	RPS10	P63325	19 kDa	2
Histone H1.4	HIST1H1E	P43274	22 kDa	2
Nuclear cap-binding protein subunit 1	NCBP1	Q3UYV9	92 kDa	2
40S ribosomal protein S9	RPS9	Q6ZWN5	23 kDa	2
Eukaryotic initiation factor 4A-II	EIF4A2	P10630	46 kDa	2
Putative uncharacterized protein (RNA-binding protein 7)	RBM7	Q3U5M9	23 kDa	2
H/ACA ribonucleoprotein complex subunit 2	NHP2	Q9CRB2	17 kDa	2
COUP transcription factor 2	NR2F2	O09018	46 kDa	2
Splicing factor, arginine/serine-rich 2	SFRS2	Q62093	25 kDa	2
SAFB-like transcription modulator	SLTM	Q8CH25	117 kDa	2
Neuronal migration protein doublecortin	DCX	O88809	41 kDa	2
40S ribosomal protein S4	RPS4	P47961	30 kDa	2
T-complex protein 1 subunit zeta	CCt6A	P80317	58 kDa	2
Putative RNA methyltransferase NOL1	NOL1	Q922K7	87 kDa	2
Putative uncharacterized protein (XRCC1)	XRCC1	Q3TGI0	69 kDa	2
Protein KIAA1967 homolog	Unknown	Q8VDP4	103 kDa	2
Putative uncharacterized protein (Pre-mRNA-splicing factor SYF1 (XPA-binding protein 2))	XAB2	Q3UKP5	100 kDa	2
Putative uncharacterized protein (Nucleolar complex protein 2 homolog)	NOC2L	Q3UZL6	80 kDa	2
T-complex protein 1 subunit theta	CTC8	P42932	60 kDa	2
ELAV-like protein 3	ELAVL3	Q60900	40 kDa	2
Myosin-Va	MYO5A	Q99104	216 kDa	2
Homeobox protein cut-like 1	CUX1	P53564	166 kDa	2
Casein kinase II subunit alpha	CSNK2A1	P19139	45 kDa	2
Serrate RNA effector molecule homolog (Ars2)	SRRT	Q99MR6	100 kDa	2