

Table S4. Protein half-lives under normal growth condition as measured by bleach-chase

Gene symbol	Description	T _{1/2} under normal growth (hours)
ANXA2	annexin A2 isoform 1	6.1 ± 0.5
BAG1	BCL2-associated athanogene.	5.3 ± 1.6
C1QBP	complement component 1, q subcomponent binding	5.7 ± 2.5
CALM2	calmodulin 2	6.7 ± 1.1
CD44	CD44 antigen isoform 1 precursor	20.8 ± 1.9
CIRBP	cold inducible RNA binding protein	6.9 ± 2.1
CKS2	CDC28 protein kinase 2	2.6 ± 1.6
COPS6	COP9 signalosome subunit 6	5.4 ± 1.0
COTL1	coactosin-like 1	8.4 ± 1.4
COX7C	cytochrome c oxidase subunit VIIc precursor	22.5 ± 5.1
DDX18	DEAD (Asp-Glu-Ala-Asp) box polypeptide 18	20.3 ± 1.4
DDX46	DEAD (Asp-Glu-Ala-Asp) box polypeptide 46	7.9 ± 2.2
DDX5	DEAD (Asp-Glu-Ala-Asp) box polypeptide 5	8.7 ± 1.0
DNMT1	DNA (cytosine-5-)-methyltransferase 1	6.9 ± 2.0
DYNC1H1	dynein, cytoplasmic, heavy polypeptide 1	13.8 ± 4.3
EEF1A1	eukaryotic translation elongation factor 1 alpha	9.9 ± 0.6
EEF1E1	eukaryotic translation elongation factor 1	2.7 ± 0.7
EEF2	eukaryotic translation elongation factor 2	8.8 ± 0.7
EIF2S2	eukaryotic translation initiation factor 2 beta	8.3 ± 1.5
EIF2S3	eukaryotic translation initiation factor 2,	10.5 ± 2.5
EIF4A1	eukaryotic translation initiation factor 4A	7.3 ± 1.2
EIF4E	eukaryotic translation initiation factor 4E	11.7 ± 0.9
EIF4EBP1	eukaryotic translation initiation factor 4E	8.5 ± 2.3
EIF4G3	eukaryotic translation initiation factor 4	8.8 ± 1.1
EIF4H	eukaryotic translation initiation factor 4H	16.3 ± 6.2
EIF5B	eukaryotic translation initiation factor 5B	8.9 ± 2.8
ENO1	enolase 1	8.0 ± 3.5
FAU	ubiquitin-like protein fubi and ribosomal	12.2 ± 1.2
FSCN1	fascin 1	5.8 ± 0.2
GAPDH	glyceraldehyde-3-phosphate dehydrogenase	0.8 ± 0.8
H2AFV	H2A histone family, member V isoform 2	13.9 ± 1.8
HAT1	histone acetyltransferase 1 isoform a	8.5 ± 1.2
HDAC2	histone deacetylase 2	4.5 ± 2.4
HMGA1	high mobility group AT-hook 1 isoform a	11.1 ± 1.5
HSP90AA1	heat shock protein 90kDa alpha (cytosolic),	4.2 ± 1.8
HSP90AB1	heat shock 90kDa protein 1, beta	8.8 ± 2.4
HSPA4L	heat shock 70kDa protein 4-like	10.6 ± 2.7

HSPH1	heat shock 105kD	16.5 ± 4.2
ILF2	interleukin enhancer binding factor 2	16.5 ± 3.5
K- α -1	tubulin, alpha 1b	15.3 ± 2.4
LMNA	lamin A/C isoform 2	12.8 ± 2.2
MYH9	myosin, heavy polypeptide 9, non-muscle	6.4 ± 0.6
NASP	nuclear autoantigenic sperm protein isoform 1	16.3 ± 2.3
NCL	nucleolin	13.9 ± 2.8
NDUFAF2	NADH dehydrogenase (ubiquinone) 1 alpha	6.6 ± 1.4
NDUFB11	NADH dehydrogenase (ubiquinone) 1 beta	10.8 ± 1.2
NPM1	nucleophosmin 1 isoform 1	5.2 ± 0.1
PLEC1	plectin 1 isoform 6	11.7 ± 4.6
POLR2F	DNA directed RNA polymerase II polypeptide F	5.4 ± 1.8
POLR2L	DNA directed RNA polymerase II polypeptide L	10.5 ± 2.6
POLR3GL	polymerase (RNA) III (DNA directed) polypeptide	3.5 ± 0.0
POMP	proteasome maturation protein	7.0 ± 2.9
PRDX5	peroxiredoxin 5 precursor, isoform a	9.4 ± 2.6
PSMA1	proteasome alpha 1 subunit isoform 2	8.8 ± 3.1
PSMA3	proteasome alpha 3 subunit isoform 1	4.0 ± 4.4
PSMA7	proteasome alpha 7 subunit	9.0 ± 2.6
PSMB1	proteasome beta 1 subunit	6.7 ± 0.1
PSMB4	proteasome beta 4 subunit	7.3 ± 0.8
PSMB6	proteasome beta 6 subunit	8.5 ± 4.7
PSMB7	proteasome beta 7 subunit proprotein	5.1 ± 0.7
PSMC1	proteasome 26S ATPase subunit 1	5.2 ± 1.5
PSMC4	proteasome 26S ATPase subunit 4 isoform 1	4.4 ± 1.2
PSMD12	proteasome 26S non-ATPase subunit 12 isoform 1	4.0 ± 2.0
RFC1	replication factor C large subunit	9.3 ± 1.5
RPA2	replication protein A2, 32kDa	11.2 ± 2.0
RPL11	ribosomal protein L11	14.9 ± 2.3
RPL18	ribosomal protein L18	9.2 ± 2.0
RPL22	ribosomal protein L22 proprotein	11.1 ± 2.8
RPL27	ribosomal protein L27	15.4 ± 3.1
RPL27A	ribosomal protein L27a	4.2 ± 1.9
RPL29	ribosomal protein L29	4.8 ± 1.8
RPL30	ribosomal protein L30	6.1 ± 0.6
RPL39	ribosomal protein L39	3.4 ± 0.5
RPL6	ribosomal protein L6	9.3 ± 1.6
RPS19BP1	S19 binding protein	21.8 ± 0.9
RPS2	ribosomal protein S2	19.7 ± 3.5
RPS3	ribosomal protein S3	5.5 ± 2.4
RPS3A	ribosomal protein S3a	6.7 ± 1.0
RPS6	ribosomal protein S6	14.4 ± 3.5
RPS7	ribosomal protein S7	4.3 ± 1.3

RPS8	ribosomal protein S8	3.0 ± 0.2
SLBP	histone stem-loop binding protein	8.2 ± 1.1
SSBP1	single-stranded DNA binding protein 1	6.9 ± 0.3
STMN1	stathmin 1	3.9 ± 0.6
TARS	threonyl-tRNA synthetase	6.6 ± 1.1
TBCA	tubulin-specific chaperone a	2.4 ± 0.0
TFAM	transcription factor A, mitochondrial	16.3 ± 3.7
TIMM23	translocase of inner mitochondrial membrane 23	7.8 ± 1.5
TOMM70A	translocase of outer mitochondrial membrane 70	6.5 ± 1.3
TUBA1C	tubulin alpha 6	8.2 ± 8.6
TUBB2C	tubulin, beta, 2	5.1 ± 0.5
TXN	thioredoxin	6.9 ± 1.6
TXNRD1	thioredoxin reductase 1	6.6 ± 0.2
UBA52	ubiquitin and ribosomal protein L40 precursor	10.8 ± 2.4
UBE2K	ubiquitin-conjugating enzyme E2-25K isoform 1	6.3 ± 0.8
UBE2N	ubiquitin-conjugating enzyme E2N	14.9 ± 2.3
UBE2V2	ubiquitin-conjugating enzyme E2 variant 2	5.6 ± 1.4
VCL	vinculin isoform meta-VCL	11.7 ± 2.1
VIL2	villin 2	11.1 ± 3.1
VIM	vimentin	4.9 ± 0.1
