

Supplementary Table 5. List of 33 common proteins detected in two orthogonal SILAC experiments as shown in Fig 1a

No.	Cellular Function	(MBT WT/MT x MLL WT/KO)	Protein Head	Gene Symbol	MBT SILAC ratio	MLL1 SILAC Ratio
1	adaptor protein	A6PWY4_WDR76_MOUSE	WD repeat domain 76	Wdr76	4.94	4.06
2	adaptor protein	Q6VN19_RBP10_MOUSE	RAN binding protein 10	Ranbp10	2.18	6.66
3	ATP genesis	Q9D3D9_ATPD_MOUSE	ATP synthase, H+ transporting, mitochondrial F1 complex, delta s	Atp5d	3.36	2.96
4	DNA replication, damage	P17918_PCNA_MOUSE	proliferating cell nuclear antigen	Pcna	6.46	4.14
5	histone	Q6ZWY9_H2B1C_MOUSE	Histone H2B	Hist1h2bc	9.69	6.42
6	histone	P62806_H4_MOUSE	Histone 4	Hist1h4a	5.48	2.31
7	histone	Q3THW5_H2AV_MOUSE	H2A histone family member V	H2afv	11.39	2.22
8	histone	P68433_H31_MOUSE	Histone 3.1	Hist1h3a	5.63	2.15
9	heterochromatin	P23198_CBX3_MOUSE	chromobox 3	Cbx3	10.23	2.97
10	heterochromatin	P83917_CBX1_MOUSE	chromobox 1	Cbx1	5.49	2.67
11	heterochromatin	Q61686_CBX5_MOUSE	chromobox 5	Cbx5	6.4	2.34
12	immune	Q99JR5_TINAL_MOUSE	tubulointerstitial nephritis antigen-like 1	Tinagl1	2.42	2.14
13	metablism	Q9CQ65_MTAP_MOUSE	methylthioadenosine phosphorylase	Mtap	2.6	5.14
14	metablism	P19157_GSTP1_MOUSE	glutathione S-transferase pi 1	Gstp1	3.6	2.64
15	mitosis	Q9WU62_INCE_MOUSE	inner centromere protein	Incenp	2.16	3.58
16	mitosis	Q8BHX3_BOREA_MOUSE	cell division cycle associated 8	Cdca8	3.28	16.26
17	mitosis	Q9CQ25_MZT2_MOUSE	mitotic spindle organizing protein 2A	Mzt2	2.18	2.59
18	onco-protein	Q8K2B0_SC65_MOUSE	Synaptonemal complex protein SC65	Leprel4	2.49	5.55
19	protein trafficking	Q9CQU0_TXD12_MOUSE	thioredoxin domain containing 12	Txndc12	2.19	9.53
20	protein trafficking	Q64310_SURF4_MOUSE	surfeit 4	Surf4	2.54	4.54
21	rRNA binding	Q8BG05_ROA3_MOUSE	heterogeneous nuclear ribonucleoprotein A3	Hnrnpa3	2.24	4.27
22	rRNA binding	Q9CQS2_NOP10_MOUSE	NOP10 ribonucleoprotein	Nop10	3.03	3.15
23	rRNA binding	Q99020_ROAA_MOUSE	heterogeneous nuclear ribonucleoprotein A/B	Hnrnpab	5	2.86
24	rRNA binding	Q60668_HNRPD_MOUSE	heterogeneous nuclear ribonucleoprotein D	Hnrnpd	5	2.68
25	rRNA binding	Q9CY66_GAR1_MOUSE	GAR1 homolog, ribonucleoprotein	Gar1	3.17	2.34
26	transcription	P28574_MAX_MOUSE	MYC associated factor X	Max	4.76	3.75
27	transcription	P28033_CEBPB_MOUSE	CCAAT/enhancer binding protein beta	Cebpb	2.14	3.73
28	transcription	Q9JKB3_YBOX3_MOUSE	Y-box binding protein 3	Ybx3	2.22	3.41
29	transcription	P52927_HMGA2_MOUSE	high mobility group AT-hook 2	Hmga2	4.43	3.16
30	transcription, DNA replication	P97863_NFIB_MOUSE	nuclear factor I/B	Nfib	2.41	2.55
31	transcription, DNA replication	P42669_PURA_MOUSE	Purine-rich element binding protein A	Pura	4.14	2.36
32	unknown function	Q3UQA7_SELH_MOUSE	Selenoprotein H	Selh	2.68	2.87
33	unknown function	Q80X32_CE024_MOUSE	UPF0461 protein C5orf24	Ce024	8.59	2.08