Full uncropped scans of Western blots
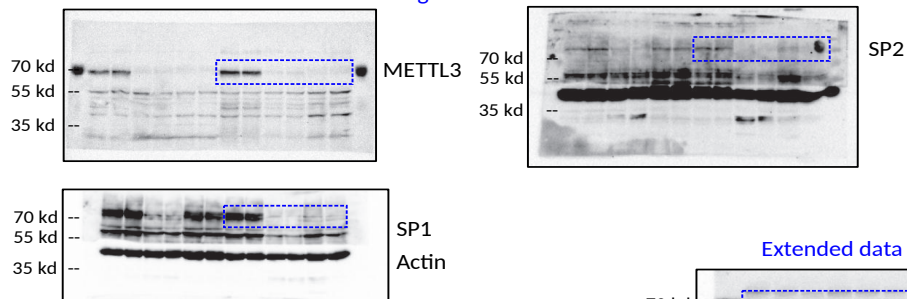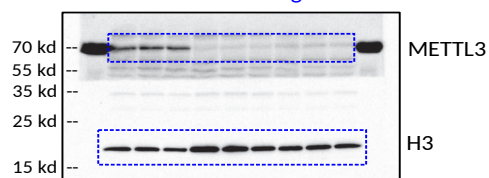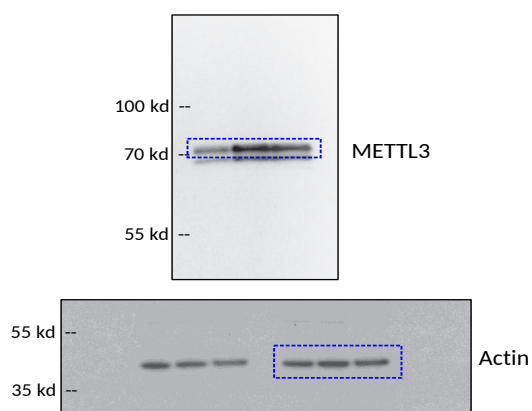
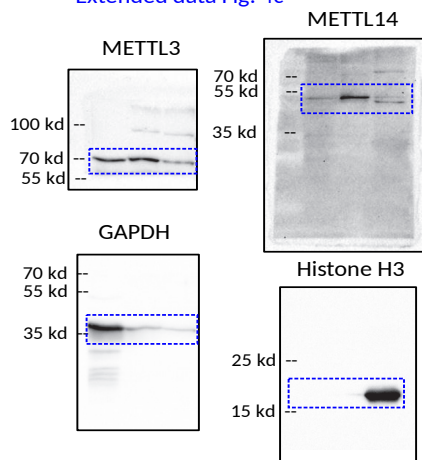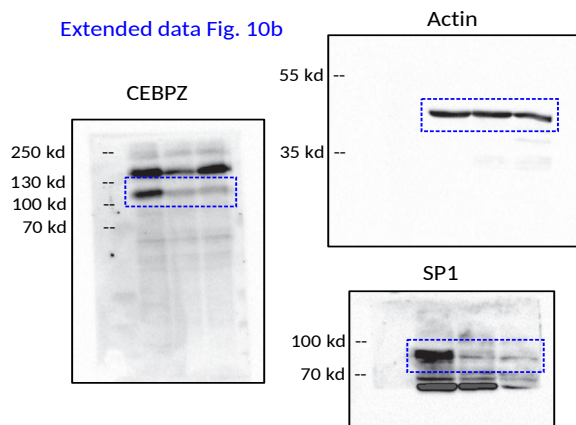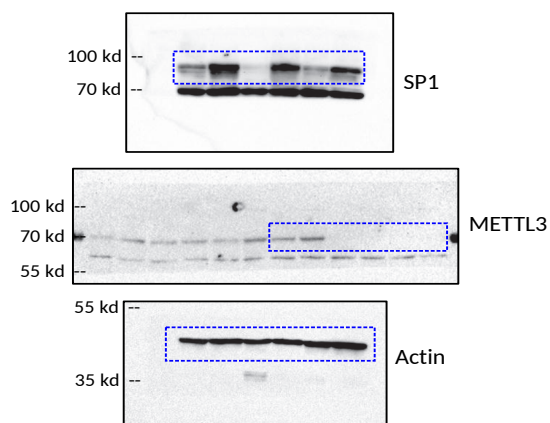## Example of gating strategy employed for flow cytometry experiments
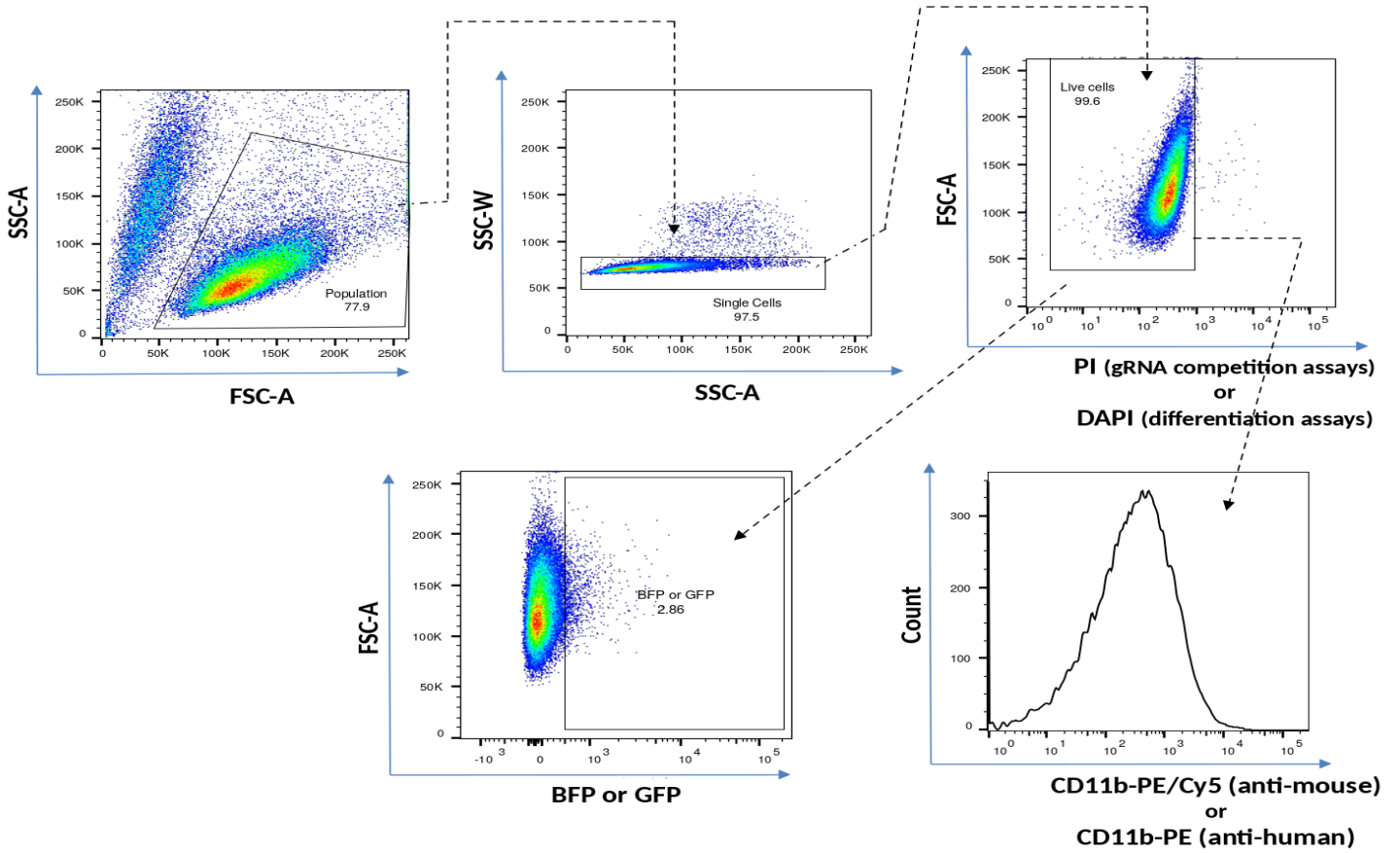
PRIMERS AND SEQUENCES

Targeted screen validation gRNAs	
Mettl3_52297471_188.15	TTCACATGGAGCTACCGTAT
Mettl3_52296667_106.7	CATCATTAGGACGGGCCGGA
Mettl3_52297471_188.7	CTGTTGTGATATCCGCTACC
Mettl16_74795982_133.3	CCTAGTTCTGTAAACACCGG
Mettl16_74773522_128.5	GATGCCAGATATGCGAAGTC
Mettl16_74787555_141.1	TTACTTGGAGCAACCTTAAA
Mettl14_123374001_62.1	TCGATGAGATTGCAGCACCT
Mettl14_123374745_142.4	ATTCTTCCAGAGGGGGCTCC
Mettl14_123374745_142.11	TCACTGCGAATGAGAAATGC
Emg1_124704981_108.5	ACTGGGAAGTGGTCGGACAC
Emg1_124705515_142.0	GAGGCCACAAAATCGGTCAA
Emg1_124705741_102.7	TTGAAGAATGGACGGGACCC
Tgs1_3602147_144.0	AAGATTGCTGAACACATTGC
Tgs1_3598514_150.1	TTCCAGAGCTGGCTAAATAC
Tgs1_3602147_144.10	ATGTGTTCAGCAATCTTCTC
Mettl2_105128986_90.1	CTCGGTCACCTAGAAATTAG
Mettl2_105129013_63.0	TCACCTAGAAATTAGTGGTG
Mettl2_105131573_61.1	CTTGAGCAGTTCAATAGCCG
Rpa3_e1.1	ACGGGCCGGTCGATATACTG
Rpa3_e1.2	GACCGGCCCGTGTGCTTCGT
Rpa3_e1.3	GCTGGCGTTGACGCGCGCTT
Rosa26	GAAGATGGGCGGGAGTCTTC

gRNA competition assay	
Mouse gRNAs	
Mettl3_Exonic_A	ACTCGGTCTCGCGACCCTG
Mettl3_Exonic_B	CCGCGATGGTTTCACAGCG
Mettl3_Domain_A	TTCACATGGAGCTACCGTAT
Mettl3_Domain_B	CATCATTAGGACGGGCCGGA
Mettl16_Exonic_A	GAAGATTTGATTGGTCACC
Mettl16_Exonic_B	ACAAAACTACTCTCCGAAG
Mettl16_Domain_A	CCTAGTTCTGTAAACACCGG
Mettl16_Domain_B	GATGCCAGATATGCGAAGTC
Sp1	GGGGCTACCCCTACCTCAA
Human gRNAs	
METTL3_Exonic_A	GCAGGGTCGATCAGCATCAC
METTL3_Exonic_B	GAAATTTCGCTCTCGAGGTC
METTL3_Domain_A	GCTCAACATACCCGTACTAC
METTL3_Domain_B	CTGTTGTGATATCCGCTACC
METTL16_Exonic_A	GTCAAGGTCGGACAATGAGA
METTL16_Exonic_B	GGGAGGAGCTTCGCATACAA
METTL16_Domain_A	CTCCGAAGAGGAATTGACAT
METTL16_Domain_B	TCAGAGCTCTGACTGCTTCG
METTL1_Exonic_A	GGCTTTGTCCGCTTGAAATG
METTL1_Exonic_B	GGGCCTGAGTGTTACCTAAC
METTL14_Exonic_A	GAGGGAGCTCATCAGGCTAA
METTL14_Exonic_B	GAGAGAAAAATAAATGATCG
SP1	GAGGGCCCGAGTCAGTCAGG
CEBPZ	GTACTTTGTCATCACCAGTC

TIDE		
MOUSE	**Forward PCR primer**	**Reverse PCR primer**
Mettl3_Dom1	CAGAAGAGGCAGGCATCCTA	TGACTCCAGTGCTGATCGAC
Mettl3_Dom2	TTAGATGCACAGGGGACACA	ATGGAATTGGGCAGAGAATG
HUMAN	**Forward PCR primer**	**Reverse PCR primer**
METTL3	CTGAGGCAGGAGAATTGCTT	GGCAGCCATACACGTTAAGA
METTL16	GCTGAGCAAAAATCACTATGTTG	AGAGCTGTGTTTTCAGTGTTTCA
METTL1	TCTGTCCTCTCTTGCCGTTCTG	AGGTGCCTAGATGTCCCACAAC
METTL14	TCTGCAACCACTGACTGAGGAA	CCAGGAGTGATGGCTGAAATGC
MOUSE	**Forward Seq primer**	**Reverse Seq primer**
Mettl3_Dom1	CACTCTGCTGTATTTCCCATACC	TGAAAGAAGGAAAGATGACCAAA
Mettl3_Dom2	CCCTCTTCCTCCTGTTCCTC	CCAATCTGCCCTTGTGTCTT
HUMAN	**Forward Seq primer**	**Reverse Seq primer**
METTL3	CCCAGGATTTTATCTCCCATT	AGGGAAGATGACCAAATACCA
METTL16	TCTCCAGGACCAGCCTTCTA	TGCAGTTTGATGAGATGCTGT
METTL1	TGTCTCCGTAGCAATGCCATGA	CAACGTCAGCAGCCAGATGAAG
METTL14	TCTGGGTTTTTACTTGCATGTCA	AGCATGTTAACATAAGTGCTGA

shRNA sequences

METTL3 sh1	CGTCAGTATCTTGGGCAAGTTCTCGAGAACTTGCCCAAGATACTGACGTTTTTG
METTL3 sh2	GCTGCACTTCAGACGAATTATCTCGAGATAATTCGTCTGAAGTGCAGCTTTTTG
CEBPZ sh1	GATCGATTTGTATACCGAAATCTCGAGATTTCGGTATACAAATCGATCTTTTTG
CEBPZ sh4	AGGCTACTCTTCCGCTCAAATCTCGAGATTTGAGCGGAAGAGTAGCCTTTTTTG
CTRL sh	CAACAAGATGAAGAGCACCAACTCGAGTTGGTGCTCTTCATCTTGTTGTTTTTG

Cloning primers

gibSP2_fw	GCCAAAAACATTAAGAAGGGCCCGATTCAGGGGTCACAACTGAGCG
gibSP2_rv	GAATGGCGCTGGGCCGGCCTTGGGGGGCAC
gibSP1_cDNA_fw	GACGTTAACCATGAGCGACCAAGATCACTCCA
gibSP1_cDNA_rv	GTGCGTTAACTCAGAAGCCATTGCCACTGATATTAATGG

METTL3 mutagenesis (DW/AA mutant)

Fwd	AGTTGTGATGGCTGCCCCACCCGCGGATATTCACATGGAACTG
Rev	CAGTTCCATGTGAATATCCGCGGGTGGGGCAGCCATCACAACT

Luciferase promoter sequences

10XUAS	AGATCTGCCAAGGCGGAGTACTGTCCTCCGGGCTGGCGGAGTACTGTCCTCCGGCAAGGTCGGAGTACTGTCCTCCGACACTAGAGGTCGGAGTACTGTCCTCCGACGCAAGGCGGAGTACTGTCCTCCGGGCTGCGGAGTACTGTCCTCCGGCAAGGTCGGAGTACTGTCCTCCGACACTAGAGGTCGGAGTACTGTCCTCCGACGCAAGGCGGAGTACTGTCCTCCGGGCTGGCGGAGTACTGTCCTCCGGACGCGTAGATCT
SCRAMBLED_10XUAS	AGATCTGCCAAGGTCAGGCCCTGTCCTAGGGGCTGGTCAGGCCCTGTCCTAGGGCAAGGTTCAGGCCCTGTCCTAGGACACTAGAGGTTCAGGCCCTGTCCTAGGACGCAAGGTCAGGCCCTGTCCTAGGGGCTGTCAGGCCCTGTCCTAGGGCAAGGTTCAGGCCCTGTCCTAGGACACTAGAGGTTCAGGCCCTGTCCTAGGACGCAAGGTCAGGCCCTGTCCTAGGGGCTGGTCAGGCCCTGTCCTAGGGACGCGTAGATCT

ChIP-qPCR	FWD	REV
SP1 tss	TGCGTCCTTTCCTGTCTCTT	AACCAATCAGAAATCAGGCG
EVI5L tss	CTCGTTATTGGGCAGAAAGC	ATAGCAAGGAAAGTGGGGGT
LRCH4 tss	CACCCAATCACAATGCTCAG	CCGTTTTCCTGCTAGTGGAG
RFX1tss	TGGGAGTTGTAGTCCGCTCT	GGAGTCTTCCTTTCTCGCCT
SP2 tss	ATTCAATTGGCTTTCGGTTG	AGAGCGACGTTGATTTGACC
LMO2 tss	AAGGACCGAGAAGGAGAGG	GAGCAGGCACGAGGAGAG
HNRNPL tss	CACCAGTCACAATGACGACC	CAATCAGTGGAGACGCAGAA

RT-PCR Taqman	FWD	REV	Probe
METTL3	CGTACTACAGGATGATGGCTTTC	TTTCATCTACCCGTTCATACCC	6
β−ACTIN	CCAACCGCGAGAAGATGA	CCAGAGGCGTACAGGGATAG	64
DICER1	CTTAAAGTTGTTAGTGAGTGGAATGAA	CTGTTATCTATCCTGTTATCAACCAAA	8
GAPDH	TCCACTGGCGTCTTCACC	GGCAGAGATGATGACCCTTTT	45
HNRNPL	TCCCCAGTTGTCCACATCA	CAAGGCCTCCACAAGGTCT	31
SP1	CAGTGGGCTACAGGGGTCT	CTTGCAATGAGCCTCCAGAT	42
SP2	CTTGTGAACGCCAGTGACA	AGTCTTAGACAGCGGGGTTG	17
CEBPZ	ATAATACTAGTGAAGCCGAGAATGG	GCCAGCATAAGGTAATCTTGCT	69

RT-PCR sybr green	FWD	REV
Firefly Luciferase	GGCCTGACAGAAACAACCAG	AAGTCCACCACCTTAGCCTC
Renilla Luciferase	CGCTATTGTCGAGGGAGCTA	GCTCCACGAAGCTCTTGATG