

Gene name	Alternate names	Methyl mark	Chromosomal location	Fused gene	Chromosomal translocation	Cancer type associated with translocation
KMT2A	MLL1/HRX/ TRX1/ ALL1/ TET1-MLL	H3K4	11q23	AF4, ELL, AF9, ENL, AF6, . . .	t(X;11)(q13;q23), t(1;11)(p32;q23), t(1;11)(q21;q23), t(2;11)(p21;q23), t(4;11)(q21;q23), t(6;11)(q27;q23), t(9;11)(p22;q23), t(10;11) (p11-13;q23), t(11;11)(q23;q25), t(11;14)(q23;q32), t(11;17)(q23;q12), t(11;17)(q23;q21), t(11;17)(q23;q25), t(11;19)(q23;p13)	Acute myeloid leukemia, acute lymphoblastic leukaemia, mixed lineage leukemia
KMT2D	MLL4/ALR	H3K4	19q13.1	HBx,	t(19;17)(q13;p11)	Hepatocellular carcinoma, Hepatitis B virus related HCCs
KMT3B	NSD1/STO/ SOTOS	H3K36	5q35	NUP98	t(5,11)(q35;p15.5), t(5,2)(q35;p23)	Acute myeloid leukemia, Sotos syndrome
NSD2	WHS/TRX5/ MMSET	H3K36me2	4p16.3	IGH	t(4;14)(p16;q32)	Multiple myeloma tumors, lung cancers, Wolf-Hirschhorn syndrome
NSD3	WHSC1L1	K3K36me2	8p11.2	NUP98	t(8;11)(p11;p15), t(8;16)(p11;p13)	Acute myeloid leukemia, myelodysplastic syndrome
KDM4C	JMJD2C/ GASC1/ JHDM3C	H3K9/ H3K36me2/3	9p24.1	IGH	t(9;14)(p24.1;q32)	Mucosa-associated lymphoid tissue lymphoma, chronic myeloid leukemia
KDM5A	JARID1A/ RBP2/ RBBP2	H3K4me2/3	12p11	NUP98	t(11;21;12) (p15;p13;p13)	Acute myeloid leukemia
JMJD1C	TRIP8	H3K9	10q21.3		46,XY,inv(10) (q11.1;q21.3)	Autism
HSPBAP1	PASS1	?	3q21.1	DIRC3	t(2;3)(q35;q21)	Familial renal cell cancer