

Supplementary Table 1: Reported AML-associated biomolecular condensates

Disease	Gene products	IDRs	Visualization	Condensate components	Methodology	Cell (lines)	Overexpression/endogenous	Mouse models	Refs.
AML, MDS	NUP98-r NUP98-NSD1 NUP98-HOXA9	FG repeat	confocal microsc. confocal microsc.	157 common interactors EP300, XPO1, SMARCA5 <i>et al.</i> KMT2A, WDR5, MOF <i>et al.</i>	Proteomics Proteomics	No human AML cell line Mouse primary HSPC, 293T Mouse primary HSPC, 293T	Retroviral overexpression Retroviral overexpression	BM reconstitution BM reconstitution	[57] [60] [62] [58]
AML, tAML	KMT2A-r	AHC domain	confocal microsc.	MEN1, DOT1L, LEDGF, PAF1C, <i>et al.</i>	Proteomics	THP1, NOMO1, MOLM13, MV4-11	Retroviral overexpression & endogenous	Transgenic & BM reconstitution	[71] [72] [73]
APL	PML-RARA	*RBCC	confocal microsc.	UBC9, SUMO1/2/3...	Immunoprecipitation	NB4	Endogenous proteins	Transgenic & BM reconstitution	[78] [80]
AML	NPM1c	A2-3, B1-2	confocal microsc.	KMT2A, ENL, AF4, AF9 <i>et al.</i>	LacO-array assay	OCI-AML3	Endogenous proteins	BM reconstitution & PDX*	[84] [89] [90]
AML, tAML	MN1	Poly-Glu strain	confocal microsc.	SMARCA4, SMARCC1, ARID1A...	Proteomics	UCSD-AML1, MUTZ-3, AMU-AML1	Endogenous proteins	BM reconstitution	[11]
AML	YTHDC1	Glu-rich (N-term.), Arg/Pro-rich (C-term.)	confocal microsc.	m6A modified RNA, YTHDC1...	<i>In vitro</i> reconstitution	THP1, NOMO1, MOLM13, OCI-AML3, KASUMI1	Endogenous proteins	BM reconstitution & PDX*	[12] [98]

* The RBCC domains (RING finger domain (R) followed by two cysteine-histidine-rich B-box domains (B) and an alpha-helical coiled-coil domain (CC)) XXX

* Patient-derived xenograft