

Supplementary figures:

Table S1. Phenotypic characterisation for del(7q) samples with high *HLXB9* expression levels.

					FISH test component percentage value	OS.time	OS	OS.unit	AML cytogenetics risk category	Age at diagnosis	Cytogenetic abnormality	Other cytogenetic abnormality	Molecular Analysis Abnormality Testing Result
Sample	HLXB9	Primary site	Gender	FISH test component									
TCGA-AB-2847-03	12.0594	WBC	Male	CBF-Beta]-7 or del(7q)	0 63	608		1 days	Intermediate/Normal		53 Normal del (7q) / 7q-	NA	FLT3 Mutation Negative IDH1 R132 Negative IDH1 R140 Negative IDH1 R172 Negative Activating RAS Negative NPMc Negative
TCGA-AB-2860-03	1.1759	WBC	Female	NA	NA	427		1 days	Poor		60 Complex (greater than or equal to 3 distinct abnormalities) del (5q) / 5q- del (7q) / 7q-	t(4;11)	FLT3 Mutation Negative IDH1 R132 Negative IDH1 R140 Negative IDH1 R172 Negative Activating RAS Negative NPMc Negative
TCGA-AB-2894-03	1.4395	WBC	Female	BCR-ABL PML-RAR MLL CBF-Beta TEL-AML 1 +8 7 or del(7q)	0 0 74 0 0 0 76	181		1 days	Poor		50 Normal del (7q) / 7q- t (9;11)	NA	FLT3 Mutation Negative IDH1 R132 Negative IDH1 R140 Negative IDH1 R172 Negative Activating RAS Negative NPMc Negative
TCGA-AB-2917-03	2.697	WBC	Female	NA	NA	1216		0 days	Poor		41 Normal Complex (greater than or equal to 3 distinct abnormalities) del (7q) / 7q-	NA	FLT3 Mutation Negative IDH1 R132 Negative IDH1 R140 Negative IDH1 R172 Negative Activating RAS Positive NPMc Negative
TCGA-AB-2935-03	2.0142	WBC	Male	-7 or del(7q)	45	61		1 days	Poor		66 del (5q) / 5q- del (7q) / 7q-	NA	BCR-ABL Negative FLT3 Mutation Negative IDH1 R132 Negative IDH1 R140 Negative IDH1 R172 Negative Activating RAS Negative NPMc Negative
TCGA-AB-2952-03	1.8336	WBC	Female	BCR-ABL PML-RAR +8	0 0 38	31		1 days	Poor		60 Complex (greater than or equal to 3 distinct abnormalities) del (5q) / 5q- del (7q) / 7q- Trisomy 8	NA	FLT3 Mutation Negative IDH1 R132 Negative IDH1 R140 Negative IDH1 R172 Negative Activating RAS Negative NPMc Negative
TCGA-AB-2987-03	1.4362	WBC	Female	BCR-ABL PML-RAR MLL CBF-Beta AML1-ETO +8 7 or del(7q)	0 0 0 0 0 0 0	184		1 days	Intermediate/Normal		75 Normal del (7q) / 7q-	NA	FLT3 Mutation Negative IDH1 R132 Negative IDH1 R140 Negative IDH1 R172 Negative Activating RAS Positive NPMc Positive

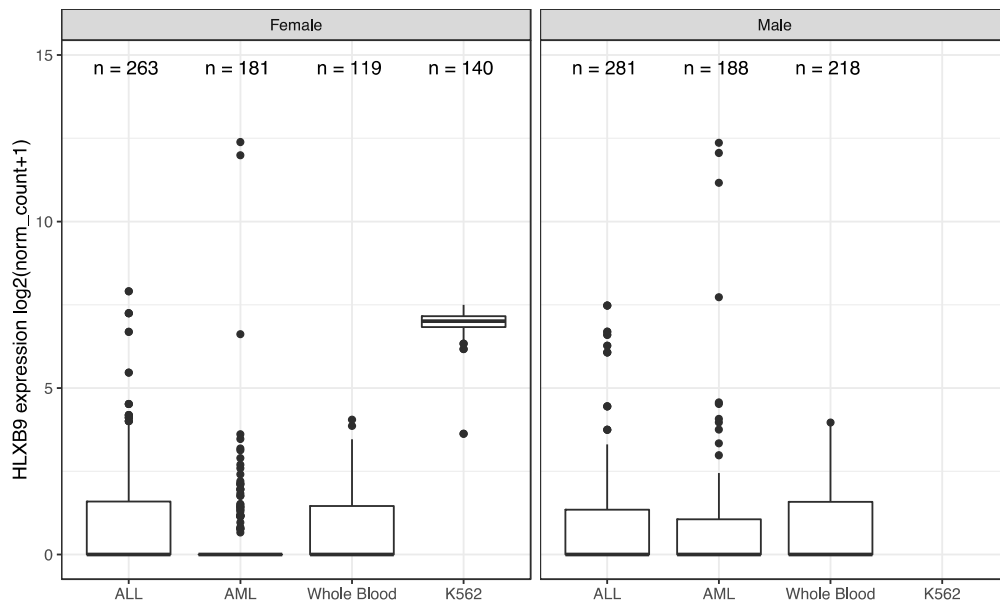


Figure S1. Distribution of *HLXB9* expression levels across datasets stratified by gender. "n" represents the number of samples in each category. The relationship between *HLXB9* expression and gender was analysed for all cohorts. We observed that there was no significant difference in the *HLXB9* expression levels between male and female samples.

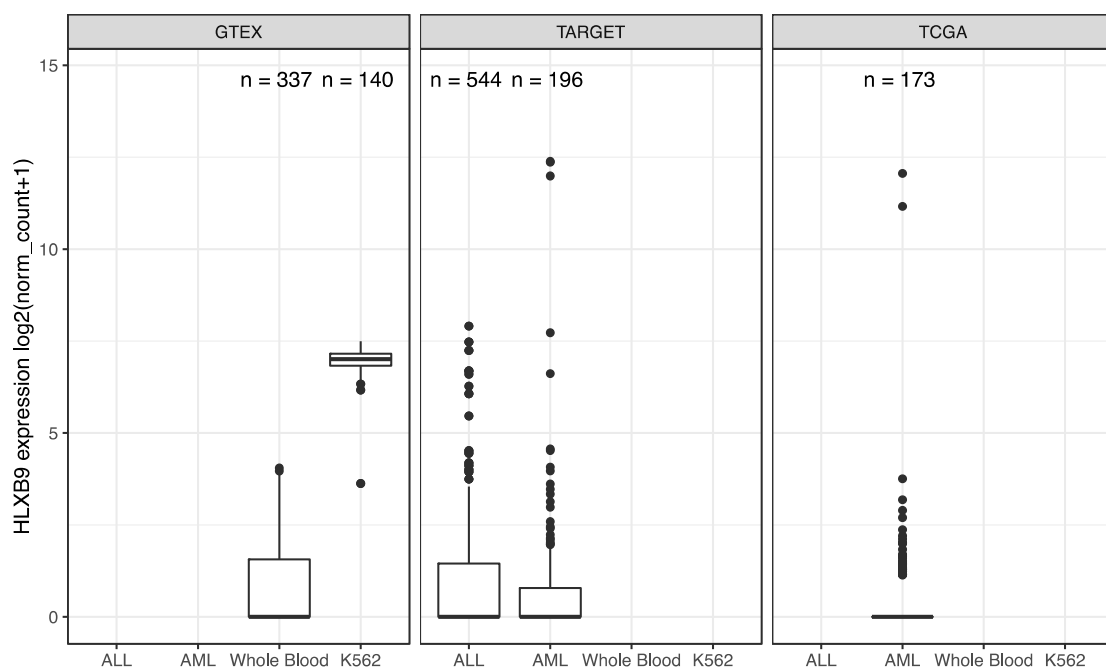


Figure S2. *HLXB9* expression levels in AML, ALL, Whole Blood and Leukemia Cell Line differentiated per dataset of origin: GTEX, TARGET and TCGA.

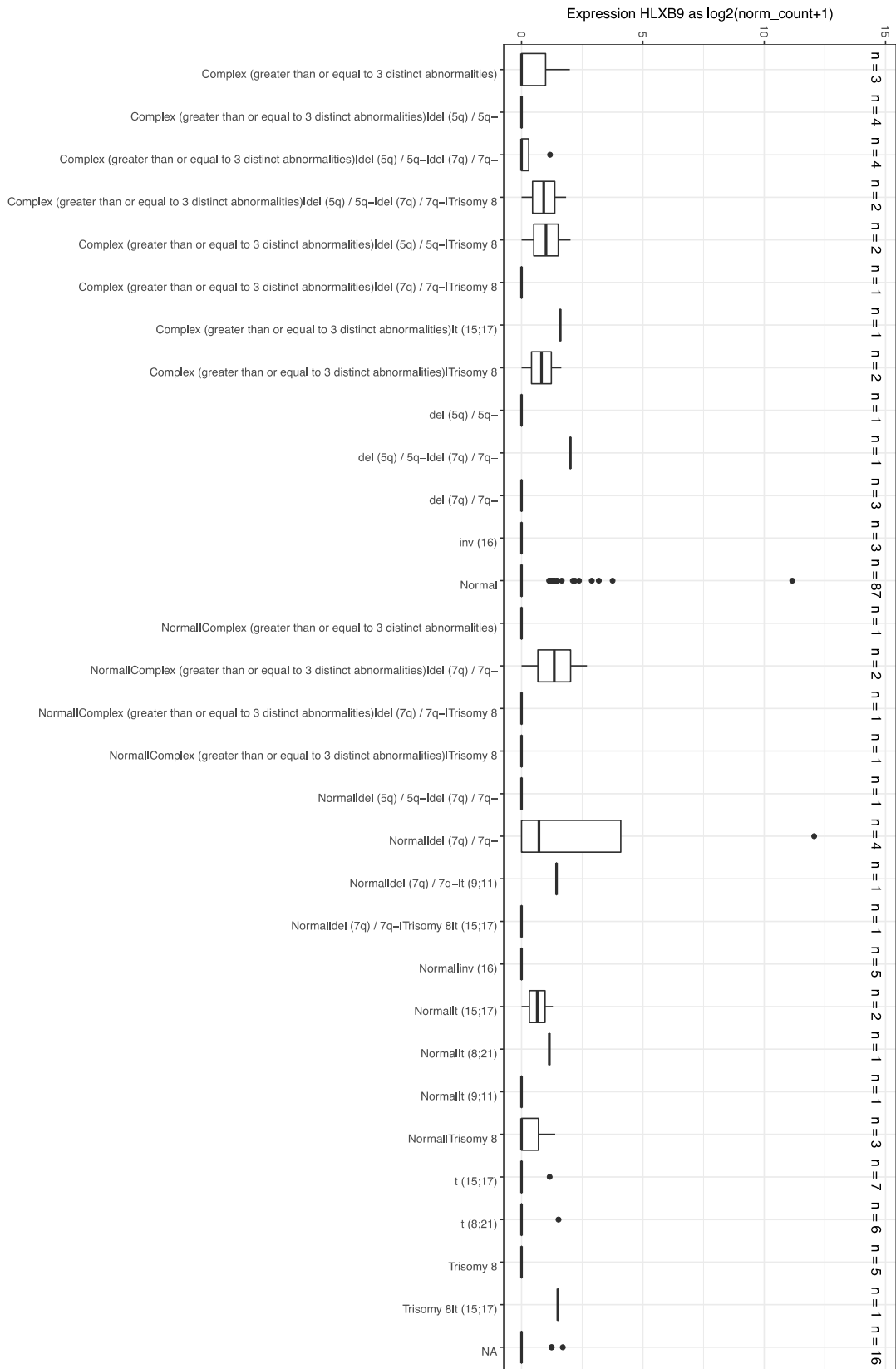


Figure S3. Distribution of HLXB9 expression levels in TCGA AML data stratified per cytogenetic phenotype. "n" signifies the number of samples in each class.