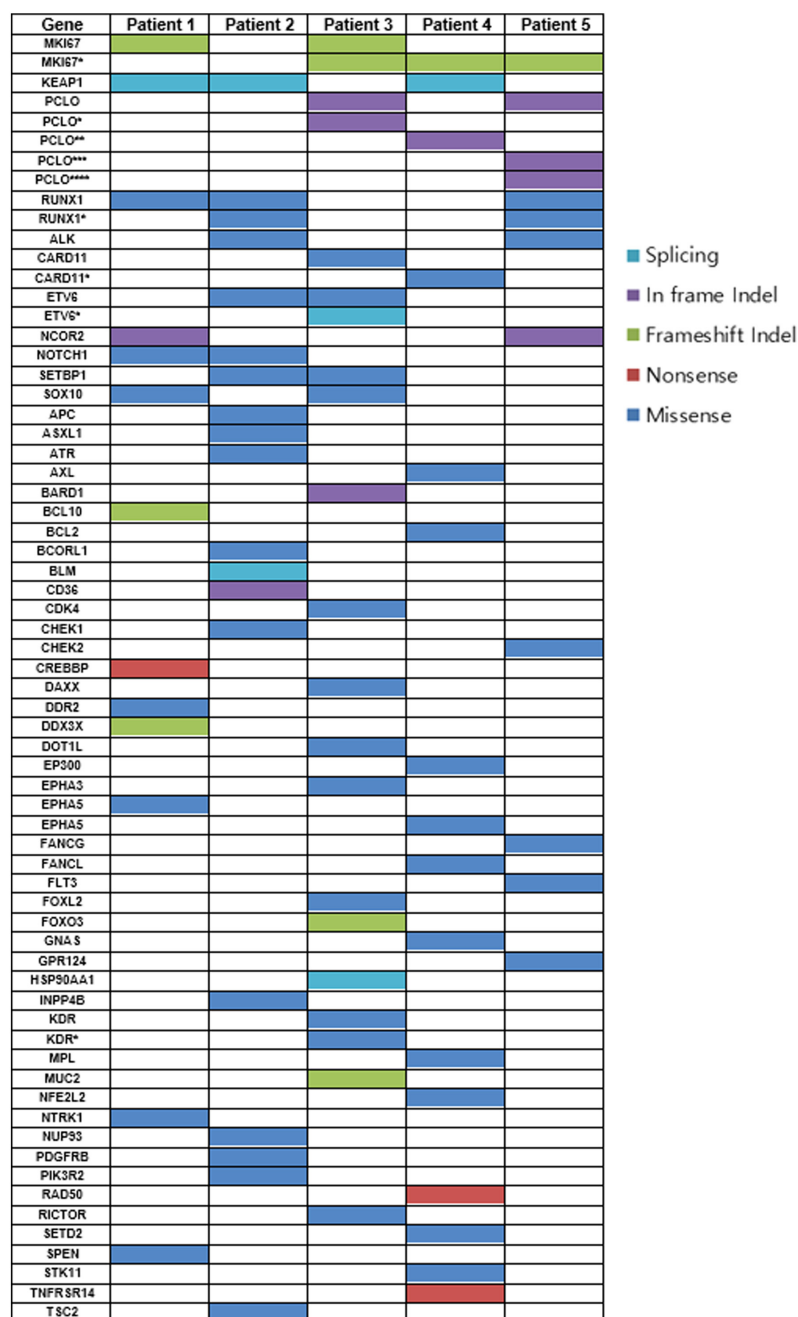


Figure S1. List of 426 genes in HemaScan™ panel.

ABL1, ACTB, AKT1, AKT2, AKT3, ALK, AMER1, ANKRD11, APC, APH1A, AR, ARAF, ARFRP1, ARHGAP26, ARID1A, ARID2, ASXL1, ATM, ATR, ATRX, AURKA, AURKB, AXIN1, AXL, B2M, BAP1, BARD1, BCL10, BCL11B, BCL2, BCL2L2, BCL6, BCL7A, BCOR, BCORL1, BCR, BIRC3, BLM, BRAF, BRCA1, BRCA2, BRD4, BRIP1, BRSK1, BTG1, BTG2, BTK, BTLA, C11ORF30, CAD, CARD11, CBFB, CBL, CCND1, CCND2, CCND3, CCNE1, CCT6B, CD22, CD274, CD28, CD36, CD58, CD70, CD79A, CD79B, CDC73, CDH1, CDK12, CDK4, CDK6, CDK8, CDKN1B, CDKN2A, CDKN2B, CDKN2C, CEBPA, CHD2, CHEK1, CHEK2, CIC, CIITA, CKS1B, CPS1, CREBBP, CRKL, CRLF2, CSF1R, CSF3R, CTCF, CTNNA1, CTNNB1, CUX1, CXCR4, DAXX, DDR2, DDX3X, DNM2, DNMT3A, DOT1L, DTX1, DUSP2, DUSP9, EBF1, ECT2L, EED, EGFR, ELP2, EP300, EPHA3, EPHA5, EPHA7, EPHB1, EPOR, ERBB2, ERBB3, ERBB4, ERG, ESR1, ETS1, ETV1, ETV4, ETV5, ETV6, EWSR1, EXOSC6, EZH2, FAF1, FAM46C, FANCA, FANCC, FANCD2, FANCE, FANCF, FANCG, FANCL, FAS, FBXO11, FBXO31, FBXW7, FGF10, FGF14, FGF19, FGF23, FGF3, FGF4, FGF6, FGFR1, FGFR2, FGFR3, FGFR4, FHIT, FLCN, FLT1, FLT3, FLT4, FLYWCH1, FOXL2, FOXO1, FOXO3, FOXP1, FRS2, FYN, GADD45B, GATA1, GATA2, GATA3, GID4, GNA11, GNA12, GNA13, GNAQ, GNAS, GPR124, GRIN2A, GSK3B, GTSE1, HDAC1, HDAC4, HDAC7, HGF, HIST1H1C, HIST1H1D, HIST1H1E, HIST1H2AC, HIST1H2AG, HIST1H2AL, HIST1H2AM, HIST1H2BC, HIST1H2BJ, HIST1H2BK, HIST1H2BO, HIST1H3B, HNF1A, HRAS, HSP90AA1, ICK, ID3, IDH1, IDH2, IGF1R, IKBKE, IKZF1, IKZF2, IKZF3, IL20RA, IL7R, INHBA, INPP4B, INPP5D, IRF1, IRF4, IRF8, IRS2, JAK1, JAK2, JAK3, JARID2, JUN, KAT6A, KDM2B, KDM4C, KDM5A, KDM5C, KDM6A, KDR, KEAP1, KIT, KLHL6, KRAS, LEF1, LILRB1, LRP1B, LRRK2, MAF, MAFB, MAGED1, MALT1, MAP2K1, MAP2K2, MAP2K4, MAP3K1, MAP3K14, MAP3K6, MAP3K7, MAPK1, MCL1, MDM2, MDM4, MED12, MEF2B, MEF2C, MEN1, MET, MIB1, MTF, MKI67, MLH1, MPL, MRE11A, MSH2, MSH3, MSH6, MTOR, MUC2, MUTYH, MYC, MYCL, MYCN, MYD88, MYO18A, NCOR2, NCSTN, NF1, NF2, NFE2L2, NFKB1A, NKX2-1, NOD1, NOTCH1, NOTCH2, NPM1, NRAS, NT5C2, NTRK1, NTRK2, NTRK3, NUP93, NUP98, P2RY8, PAG1, PAK3, PALB2, PASK, PAX5, PBRM1, PC, PCBP1, PCLO, PDCD1, PDCD11, PDCD1LG2, PDGFRA, PDGFRB, PDK1, PHF6, PIK3CA, PIK3CG, PIK3R1, PIK3R2, PIM1, PLCG1, PLCG2, POT1, POU2F2, PPP2R1A, PRDM1, PRKARIA, PRKDC, PRSS8, PTCH1, PTEN, PTPN11, PTPN2, PTPN6, PTPRO, RAD21, RAD50, RAD51, RAF1, RARA, RASGEF1A, RB1, RELN, RET, RHOA, RHOT2, RICTOR, RNF43, ROS1, RPTOR, RUNX1, S1PR2, SDHA, SDHB, SDHC, SDHD, SERP2, SETBP1, SETD2, SF3B1, SGK1, SMAD2, SMAD4, SMARCA1, SMARCA4, SMARCA11, SMARCB1, SMARCD1, SMC1A, SMC3, SMO, SOCS1, SOCS2, SOCS3, SOX10, SOX2, SPEN, SPOP, SRC, SRSF2, STAG2, STAT1, STAT2, STAT3, STAT4, STAT5A, STAT5B, STAT6, STK11, SUFU, SUZ12, TAF1, TBL1XR1, TCF3, TCL1A, TET2, TET3, TGFB2, TLL2, TMEM30A, TMPSR2, TMSL3, TNFAIP3, TNFRSF11A, TNFRSF14, TNFRSF17, TOP1, TP53, TP63, TRAF2, TRAF3, TRAF5, TSC1, TSC2, TSHR, TUSC3, TYK2, U2AF1, U2AF2, VAV1, VHL, WDR90, WHSC1, WIF1, WISP3, WT1, WWOX, XBP1, XPO1, YY1AP1, ZMYM3, ZNF217, ZNF24, ZNF703, ZRSR2

Figure S2. Genetic landscape confirmed as SNV and InDels in HemaScan™ in five patients.



*, **, ***, and****: Different mutation site