Chromosome	Gene	fwd	rev	Amplicon name
Chr1	**NRAS**	ACAACCTAAAACC AACTCTTCCCATA ATT	TGGTGAAACCT GTTTGTTGGAC AT	NRAS_1
Chr1	**NRAS**	CACGTTAAGCTTA TTGCATAACTGAA TGT	GGTTCTTGCTG GTGTGAAATGA C	NRAS_2
Chr11	**WT1**	TCCTTCTCTCAAC TGAGTCTAAACCT T	CTCACTGTGCC CACATTGTTAG	WT1_2
Chr11	**WT1**	CTAAACACATGGC TGACTCTCTCA	TAGTAGGAGAG GTTGCCTTTAA TGAGAT	WT1_1
Chr11	**WT1**	GCCTGGAAAAGG AGCTCTTGAA	TCAAGACCTAC GTGAATGTTCA CATG	WT1_3
Chr11	**CBL**	AGGAAACAAGTC TTCACTTTTTCTG TTAAC	ACCGAATTTTC CAAGGTTATTA CATAGCT	CBL_2
Chr11	**CBL**	TTCAGATGCATCT GTTACTATCTTTT GCT	GATTTTGCCAG TCTCCTAAACT GC	CBL_1
Chr12	**KRAS**	TCCTCATGTACTG GTCCCTCAT	CGTCATCTTTG GAGCAGGAAC AAT	KRAS_2
Chr12	**KRAS**	AAAGAATGGTCC TGCACCAGTAA	AAAGGTGAGTT TGTATTAAAAG GTACTGGT	KRAS_1
Chr12	**KRAS**	CAGATCTGTATTT ATTTCAGTGTTAC TTACCT	GACTCTGAAGA TGTACCTATGG TCCTA	KRAS_3
Chr12	**PTPN11**	GCCTCCCTTTCC AATGGACTAT	GCAGCAGACTT TGTGGTCACTA AA	PTPN11_2
Chr12	**PTPN11**	CCACTAAAAGTTG TGCATTAAACAAC TTCA	CTAGCAAGAGA ATGAGAATCCG CAT	PTPN11_1
Chr13	**FLT3**	GCAGACTGCTGT GAGGGTTTTT	CTCTGGTGTCA TTCTTGACAGT GT	FLT3_1
Chr13	**FLT3**	GAGTGCTCAGTG TCTAATTCCACTT	ACAGAAAAAGC AGACAGCTCTG AAA	FLT3_3
Chr13	**FLT3**	TCCTAGTACCTTC CCTGCAAAGA	TGCCTATTCCT AACTGACTCAT CATTTC	FLT3_2
Chr13	**FLT3**	ACACTGACCCTAT ACTCTCCTGTAAA A	CACAGAAGGA GTCTGGAATAG AAAGG	FLT3_4
Chr15	**IDH2**	CCACAAAGTCTG TGGCCTTGTA	CCTCACAGAGT TCAAGCTGAAG AAG	IDH2_1
Chr17	**TP53**	GGAAAGAGGCAA GGAAAGGTGATA	GACCTGATTTC CTTACTGCCTC TT	TP53_4
Chr17	**TP53**	TGTGATGAGAGG TGGATGGGTA	CCTCATCTTGG GCCTGTGTTAT	TP53_2
Chr17	**TP53**	GGGTTATAGGGA GGTCAAATAAGCA	GGCCTCTGATT CCTCACTGATT G	TP53_1
Chr17	**TP53**	CTGCTCACCATC GCTATCTGAG	TGCCGTCTTCC AGTTGCTTTAT	TP53_3

Chromosome	Gene	fwd	rev	Amplicon name
Chr17	**MIR142**	CGAAGCCCACAG TACACTCATC	GGATCTTAGGA AGCCACAAGG A	MIR142_1
Chr17	**SRSF2**	CCTCAGCCCCGT TTACCT	CTTCGTTCGCT TTCACGAC	SRSF2_2
Chr2	**DNMT3A**	TTTGTGTCGCTA CCTCAGTTTG	GGTCCTGCTG TGTGGTTAGAC	DNMT3A_10
Chr2	**DNMT3A**	CCAGGACGTTTG TGGAAAACAAG	TGGTGAATGAA TTCGTGCTTAT TCCT	DNMT3A_6
Chr2	**DNMT3A**	CAGAGCAGCTAG TCATTCAGCA	TCTTCAAACCG TCTCCTGTTTT	DNMT3A_13
Chr2	**DNMT3A**	CAGCTCCACAAT GCAGATGAGA	CCAGCTGATG GCTTTCTCTTC C	DNMT3A_2
Chr2	**DNMT3A**	CTGTCCCAGGGC AGAAATATCC	CAAAGGACTTC TTTGCCAAGTT CAC	DNMT3A_5
Chr2	**DNMT3A**	GGACTGCATACG TTTCCACTTC	CATCTGACCTG TTGTGCTCACT	DNMT3A_1
Chr2	**DNMT3A**	CCCACAACTTAC CACTGAGAATTT G	GCCTCGTGAC CACTGTGTAAT G	DNMT3A_4
Chr2	**SF3B1**	CTTCCATAAAGG CTTTAACACAGAA TCAA	GCTATGGTTCA TGTTTTGCTTT TACCTAAT	SF3B1_1
Chr2	**SF3B1**	TGTGTGTGTACC TCTAGTCCCAA	GTGTGCAAAA GCAAGAAGTC CT	SF3B1_2
Chr2	**IDH1**	AATGTGTTGAGAT GGACGCCTATT	CTTGTGAGTG GATGGGTAAAA CCTAT	IDH1_1
Chr20	**ASXL1**	CAGGACCCTCGC AGACATTAAA	GGCAGTAGTT GTGTTCGCTGT A	ASXL1_1
Chr20	**ASXL1**	CCTCAGTAGCTG AGAGATTAGTGG A	TCTGTTCTGCA GGCAATCAGT C	ASXL1_2
Chr21	**RUNX1**	CGACATGCCGAT GCCGAT	CCCATCCTCCT AGGCGGTATC	RUNX1_5
Chr21	**RUNX1**	CATGGGACTCAG AGTAGAGATAGG T	CGTGGTCCTA CGATCAGTCCT A	RUNX1_2
Chr21	**RUNX1**	AGTGGGCTCCAT CTGGTACTTA	CCACAATAGGA CATCGGCAGA AA	RUNX1_3
Chr21	**RUNX1**	CTCAGTGCACAG AAACAAGCTT	CCATCACTGTC TTCACAAACCC A	RUNX1_4
Chr21	**RUNX1**	AATTTTGAAATGT GGGTTTGTTG	GTCCTTTGACT GGTGTTTAGGT G	RUNX1_7
Chr21	**U2AF1**	GGTGGGTTGGAA GGAGACATTT	AGTCTTATTAA AGCGTGGATG GCAA	U2AF1_1
Chr21	**U2AF1**	AGTCGATCACCT GCCTCACTAT	GCTCTCATTTT CCCTTACAGAG TCAAC	U2AF1_2

Chromosome	Gene	fwd	rev	Amplicon name
Chr3	**GATA2**	AGTCTTCGCTTG GGCTTGAT	GGACTCCCTC CCGAGAACTT	GATA2_1
Chr4	**KIT**	CCTCCTTGTACC TTCCACTCCTT	CTCAGTTCCTG GACAAAAATAC CAATCTAT	KIT_2
Chr4	**KIT**	AAATGGTTTTCTT TTCTCCTCCAAC CTA	CTAAAATGTGT GATATCCCTAG ACAGGATT	KIT_1
Chr4	**TET2**	ACAAGACCAATG TCAGAACACCT	ACTGAAGAATT GATGGCAGTG AT	TET2_15
Chr4	**TET2**	TGAGGCATCACT GCCATCAATT	GCACATGAGC TTTTGGTAAAT GGTC	TET2_10
Chr4	**TET2**	TCTTCTTCACAG GTGCTTTCAA	AAGAGATGCC ACCTTAGAGCA G	TET2_13
Chr4	**TET2**	GGATGTGGTCAT AGAATAAAGTTAT GCTCA	CAATTCTCAGG GTCAGATTTAC AAATCAAA	TET2_1
Chr4	**TET2**	TTCGCAGAAGCA GCAGTGAAGA	CCTTTCAACCA AAGATTGGGCT TTC	TET2_6
Chr4	**TET2**	AGTCAATTGAAAT AGTTCTGTGTGT GGTTA	GGGATCTTGCT TCTGGCAAACT TA	TET2_8
Chr4	**TET2**	ATAAAGGCACCAT ATATTGTGTTTGG GA	CAAGTAAGTTG TTACAATTGCT GCCAAT	TET2_5
Chr4	**TET2**	TGGTCTAAATACT AGTGAGTTTTCG GTGTA	GCAGTGTGAG AACAGACTCAA CAG	TET2_7
Chr4	**TET2**	GACTTTGCTCTTA TCTTTGCTTAATG GG	AGACTCTGTCT GAGGGTGATG T	TET2_3
Chr4	**TET2**	AGCTCTTAACCAT GATAGAACTGCT TG	GGTGATTCCTA TTGGGATTCTT TAAAGGG	TET2_2
Chr5	**NPM1**	GATGTCTATGAAG TGTTGTGGTTCC T	GACAGCCAGA TATCAACTGTT ACAGAA	NPM1_1
Chr7	**EZH2**	TGCAAATTCAGA ATTTCAAACTGCA TGT	CATTTTAATGC ACCCACTATCT TCAGC	EZH2_1
Chr7	**EZH2**	CTGACTTGTTCA CATAACAAACAAC TATCC	AGAACTGTAAC CAGTTGCATTT ACAAAATC	EZH2_2
Chr8	**RAD21**	GAAACATTTCTAA GGATTTTCCTTG CACT	AGAACAATGTT CTACGCACATT TTGTTC	RAD21_1
Chr9	**JAK2**	GCAGGTCCATATA AAGGGACCAA	AGGCATTAGAA AGCCTGTAGTT TTACTTAC	JAK2_1
ChrX	**STAG2**	TTTTGTGAATTCA TTGGCGTGTTAG TAC	GAGTGTCCTCT TAGTGGTCACT TTATAAAT	STAG2_1
ChrX	**PHF6**	ACAGTCCAGCTC ACAACAACAT	AGAAATAAGTT TCAGTAACATC AGCATCCT	PHF6_1

Supplemental Table S1. *AML targeted sequencing panel.* List of the 25 genes and gene specific primer sequences for the 62 amplicon targeted sequencing panel. The panel was designed to include at least partial coverage for 18 of the 23 most significantly mutated genes in AML, including 14 of the top 15 most commonly mutated genes.