



The following applies to HSCHP / High Sensitivity Clonal Hematopoiesis Panel, Next-Generation Sequencing. Next-generation sequencing is performed to test for the presence of single nucleotide variations, deletions, and insertions in coding regions and intron/exon boundaries of the genes listed. When appropriate, alterations detected are confirmed by an independent method. Default reportable range offset is +/- 5 base pairs around each targeted exon region.

Refer to the gene regions table below for complete gene coverage information. To verify if a specific region/exon/variant is covered by this assay, contact the laboratory at 800-533-1710.

Genomic Build: GRCh37 (hg19) unless otherwise specified

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
ASXL1	Ex1	chr20	30946574	30946640	NM_015338
ASXL1	Ex1	chr20	30947106	30947142	NM_001363734
ASXL1	Ex2	chr20	30954182	30954274	NM_015338
ASXL1	Ex3	chr20	30955525	30955537	NM_015338
ASXL1	Ex4	chr20	30956813	30956931	NM_015338
ASXL1	Ex5	chr20	30959962	30959977	NM_001164603
ASXL1	Ex5	chr20	31015926	31016056	NM_015338
ASXL1	Ex6	chr20	31016123	31016230	NM_015338
ASXL1	Ex7	chr20	31017136	31017239	NM_015338
ASXL1	Ex8	chr20	31017699	31017861	NM_015338
ASXL1	Ex9	chr20	31019119	31019292	NM_015338
ASXL1	Ex10	chr20	31019381	31019487	NM_015338
ASXL1	Ex11	chr20	31020678	31020793	NM_015338
ASXL1	Ex12	chr20	31021082	31021725	NM_015338
ASXL1	Ex13	chr20	31022230	31025146	NM_015338
ATM	Ex2	chr11	108098347	108098428	NM_000051
ATM	Ex3	chr11	108098498	108098620	NM_000051
ATM	Ex4	chr11	108099900	108100055	NM_000051
ATM	Ex5	chr11	108106392	108106566	NM_000051
ATM	Ex6	chr11	108114675	108114850	NM_000051
ATM	Ex7	chr11	108115510	108115758	NM_000051
ATM	Ex8	chr11	108117686	108117859	NM_000051
ATM	Ex9	chr11	108119655	108119834	NM_000051
ATM	Ex10	chr11	108121423	108121804	NM_000051
ATM	Ex11	chr11	108122559	108122763	NM_000051
ATM	Ex12	chr11	108123539	108123644	NM_000051
ATM	Ex13	chr11	108124536	108124771	NM_000051
ATM	Ex14	chr11	108126937	108127072	NM_000051
ATM	Ex15	chr11	108128203	108128338	NM_000051
ATM	Ex16	chr11	108129708	108129807	NM_000051
ATM	Ex17	chr11	108137893	108138074	NM_000051

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
ATM	Ex18	chr11	108139132	108139341	NM_000051
ATM	Ex19	chr11	108141786	108141878	NM_000051
ATM	Ex20	chr11	108141973	108142138	NM_000051
ATM	Ex21	chr11	108143254	108143339	NM_000051
ATM	Ex22	chr11	108143444	108143584	NM_000051
ATM	Ex23	chr11	108150213	108150340	NM_000051
ATM	Ex24	chr11	108151717	108151900	NM_000051
ATM	Ex25	chr11	108153432	108153611	NM_000051
ATM	Ex26	chr11	108154949	108155205	NM_000051
ATM	Ex27	chr11	108158322	108158447	NM_000051
ATM	Ex28	chr11	108159699	108159835	NM_000051
ATM	Ex29	chr11	108160324	108160533	NM_000051
ATM	Ex30	chr11	108163341	108163525	NM_000051
ATM	Ex31	chr11	108164035	108164209	NM_000051
ATM	Ex32	chr11	108165649	108165791	NM_000051
ATM	Ex33	chr11	108168009	108168114	NM_000051
ATM	Ex34	chr11	108170436	108170617	NM_000051
ATM	Ex35	chr11	108172370	108172521	NM_000051
ATM	Ex36	chr11	108173575	108173761	NM_000051
ATM	Ex37	chr11	108175397	108175584	NM_000051
ATM	Ex38	chr11	108178619	108178716	NM_000051
ATM	Ex39	chr11	108180882	108181047	NM_000051
ATM	Ex40	chr11	108183133	108183230	NM_000051
ATM	Ex41	chr11	108186545	108186643	NM_000051
ATM	Ex42	chr11	108186733	108186845	NM_000051
ATM	Ex43	chr11	108188095	108188253	NM_000051
ATM	Ex44	chr11	108190676	108190790	NM_000051
ATM	Ex45	chr11	108192023	108192152	NM_000051
ATM	Ex46	chr11	108196032	108196276	NM_000051
ATM	Ex47	chr11	108196780	108196957	NM_000051
ATM	Ex48	chr11	108198367	108198490	NM_000051
ATM	Ex49	chr11	108199743	108199970	NM_000051
ATM	Ex50	chr11	108200936	108201153	NM_000051
ATM	Ex51	chr11	108202166	108202289	NM_000051
ATM	Ex52	chr11	108202601	108202769	NM_000051
ATM	Ex53	chr11	108203484	108203632	NM_000051
ATM	Ex54	chr11	108204608	108204700	NM_000051
ATM	Ex55	chr11	108205691	108205841	NM_000051
ATM	Ex56	chr11	108206567	108206693	NM_000051

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
<i>ATM</i>	Ex57	chr11	108213944	108214103	NM_000051
<i>ATM</i>	Ex58	chr11	108216465	108216640	NM_000051
<i>ATM</i>	Ex59	chr11	108218001	108218097	NM_000051
<i>ATM</i>	Ex60	chr11	108224488	108224612	NM_000051
<i>ATM</i>	Ex61	chr11	108225533	108225606	NM_000051
<i>ATM</i>	Ex62	chr11	108235804	108235950	NM_000051
<i>ATM</i>	Ex63	chr11	108236047	108236240	NM_000051
<i>BARD1</i>	Ex11	chr2	215593395	215593737	NM_000465
<i>BARD1</i>	Ex10	chr2	215595130	215595237	NM_000465
<i>BARD1</i>	Ex9	chr2	215609786	215609888	NM_000465
<i>BARD1</i>	Ex8	chr2	215610441	215610583	NM_000465
<i>BARD1</i>	Ex7	chr2	215617166	215617284	NM_000465
<i>BARD1</i>	Ex6	chr2	215632201	215632383	NM_000465
<i>BARD1</i>	Ex5	chr2	215633951	215634041	NM_000465
<i>BARD1</i>	Ex4	chr2	215645279	215646238	NM_000465
<i>BARD1</i>	Ex3	chr2	215657016	215657174	NM_000465
<i>BARD1</i>	Ex2	chr2	215661780	215661846	NM_000465
<i>BARD1</i>	Ex1	chr2	215674131	215674298	NM_000465
<i>BCOR</i>	Ex15	chrX	39911357	39911658	NM_001123385
<i>BCOR</i>	Ex14	chrX	39913134	39913300	NM_001123385
<i>BCOR</i>	Ex13	chrX	39913504	39913591	NM_001123385
<i>BCOR</i>	Ex12	chrX	39914616	39914771	NM_001123385
<i>BCOR</i>	Ex11	chrX	39916403	39916579	NM_001123385
<i>BCOR</i>	Ex10	chrX	39921387	39921651	NM_001123385
<i>BCOR</i>	Ex9	chrX	39921994	39922329	NM_001123385
<i>BCOR</i>	Ex8	chrX	39922856	39923210	NM_001123385
<i>BCOR</i>	Ex7	chrX	39923584	39923857	NM_001123385
<i>BCOR</i>	Ex6	chrX	39930221	39930417	NM_001123385
<i>BCOR</i>	Ex5	chrX	39930885	39930948	NM_001123385
<i>BCOR</i>	Ex4	chrX	39931597	39934438	NM_001123385
<i>BCOR</i>	Ex3	chrX	39935702	39935790	NM_001123385
<i>BCOR</i>	Ex2	chrX	39937092	39937187	NM_001123385
<i>BCORL1</i>	Ex2	chrX	129139203	129139298	NM_001379451
<i>BCORL1</i>	Ex3	chrX	129146549	129146649	NM_001379451
<i>BCORL1</i>	Ex4	chrX	129146921	129150194	NM_001379451
<i>BCORL1</i>	Ex5	chrX	129154955	129155130	NM_001379451
<i>BCORL1</i>	Ex6	chrX	129156867	129156957	NM_001379451
<i>BCORL1</i>	Ex7	chrX	129158960	129159359	NM_001379451
<i>BCORL1</i>	Ex8	chrX	129162605	129162841	NM_001379451

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
<i>BCORL1</i>	Ex9	chrX	129168425	129168656	NM_001379451
<i>BCORL1</i>	Ex10	chrX	129171337	129171513	NM_001379451
<i>BCORL1</i>	Ex11	chrX	129173107	129173262	NM_001379451
<i>BCORL1</i>	Ex12	chrX	129184687	129184774	NM_001379451
<i>BCORL1</i>	Ex13	chrX	129185830	129185996	NM_001379451
<i>BCORL1</i>	Ex14	chrX	129189824	129190116	NM_001379451
<i>BRAF</i>	Ex15	chr7	140453070	140453198	NM_004333
<i>BRCA1</i>	Ex23	chr17	41197690	41197824	NM_007294
<i>BRCA1</i>	Ex22	chr17	41199655	41199725	NM_007294
<i>BRCA1</i>	Ex21	chr17	41201133	41201216	NM_007294
<i>BRCA1</i>	Ex20	chr17	41203075	41203139	NM_007294
<i>BRCA1</i>	Ex19	chr17	41209064	41209157	NM_007294
<i>BRCA1</i>	Ex18	chr17	41215345	41215395	NM_007294
<i>BRCA1</i>	Ex17	chr17	41215886	41215973	NM_007294
<i>BRCA1</i>	Ex16	chr17	41219620	41219717	NM_007294
<i>BRCA1</i>	Ex15	chr17	41222940	41223260	NM_007294
<i>BRCA1</i>	Ex14	chr17	41226343	41226543	NM_007294
<i>BRCA1</i>	Ex13	chr17	41228500	41228636	NM_007294
<i>BRCA1</i>	Ex13	chr17	41231346	41231421	NM_007300
<i>BRCA1</i>	Ex12	chr17	41234416	41234597	NM_007294
<i>BRCA1</i>	Ex11	chr17	41242956	41243054	NM_007294
<i>BRCA1</i>	Ex10	chr17	41243447	41246882	NM_007294
<i>BRCA1</i>	Ex9	chr17	41247858	41247944	NM_007294
<i>BRCA1</i>	Ex8	chr17	41249256	41249311	NM_007294
<i>BRCA1</i>	Ex7	chr17	41251787	41251902	NM_007294
<i>BRCA1</i>	Ex6	chr17	41256134	41256283	NM_007294
<i>BRCA1</i>	Ex5	chr17	41256880	41256978	NM_007294
<i>BRCA1</i>	Ex4	chr17	41258468	41258555	NM_007294
<i>BRCA1</i>	Ex3	chr17	41267738	41267801	NM_007294
<i>BRCA1</i>	Ex2	chr17	41276029	41276118	NM_007294
<i>BRCA2</i>	Ex2	chr13	32890593	32890669	NM_000059
<i>BRCA2</i>	Ex3	chr13	32893209	32893467	NM_000059
<i>BRCA2</i>	Ex4	chr13	32899208	32899326	NM_000059
<i>BRCA2</i>	Ex5	chr13	32900233	32900292	NM_000059
<i>BRCA2</i>	Ex6	chr13	32900374	32900424	NM_000059
<i>BRCA2</i>	Ex7	chr13	32900631	32900755	NM_000059
<i>BRCA2</i>	Ex8	chr13	32903575	32903634	NM_000059
<i>BRCA2</i>	Ex9	chr13	32905051	32905172	NM_000059
<i>BRCA2</i>	Ex10	chr13	32906404	32907529	NM_000059

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
<i>BRCA2</i>	Ex11	chr13	32910397	32915338	NM_000059
<i>BRCA2</i>	Ex12	chr13	32918690	32918795	NM_000059
<i>BRCA2</i>	Ex13	chr13	32920959	32921038	NM_000059
<i>BRCA2</i>	Ex14	chr13	32928993	32929430	NM_000059
<i>BRCA2</i>	Ex15	chr13	32930560	32930751	NM_000059
<i>BRCA2</i>	Ex16	chr13	32931874	32932071	NM_000059
<i>BRCA2</i>	Ex17	chr13	32936655	32936835	NM_000059
<i>BRCA2</i>	Ex18	chr13	32937311	32937675	NM_000059
<i>BRCA2</i>	Ex19	chr13	32944534	32944699	NM_000059
<i>BRCA2</i>	Ex20	chr13	32945088	32945242	NM_000059
<i>BRCA2</i>	Ex21	chr13	32950802	32950933	NM_000059
<i>BRCA2</i>	Ex22	chr13	32953449	32953657	NM_000059
<i>BRCA2</i>	Ex23	chr13	32953882	32954055	NM_000059
<i>BRCA2</i>	Ex24	chr13	32954139	32954287	NM_000059
<i>BRCA2</i>	Ex25	chr13	32968821	32969075	NM_000059
<i>BRCA2</i>	Ex26	chr13	32971030	32971186	NM_000059
<i>BRCA2</i>	Ex27	chr13	32972294	32972912	NM_000059
<i>BRIP1</i>	Ex20	chr17	59760652	59761506	NM_032043
<i>BRIP1</i>	Ex19	chr17	59763192	59763531	NM_032043
<i>BRIP1</i>	Ex18	chr17	59770786	59770878	NM_032043
<i>BRIP1</i>	Ex17	chr17	59793307	59793429	NM_032043
<i>BRIP1</i>	Ex16	chr17	59820369	59820500	NM_032043
<i>BRIP1</i>	Ex15	chr17	59821788	59821957	NM_032043
<i>BRIP1</i>	Ex14	chr17	59853757	59853928	NM_032043
<i>BRIP1</i>	Ex13	chr17	59857617	59857767	NM_032043
<i>BRIP1</i>	Ex12	chr17	59858196	59858371	NM_032043
<i>BRIP1</i>	Ex11	chr17	59861626	59861790	NM_032043
<i>BRIP1</i>	Ex10	chr17	59870953	59871095	NM_032043
<i>BRIP1</i>	Ex9	chr17	59876456	59876665	NM_032043
<i>BRIP1</i>	Ex8	chr17	59878609	59878840	NM_032043
<i>BRIP1</i>	Ex7	chr17	59885823	59886123	NM_032043
<i>BRIP1</i>	Ex6	chr17	59924457	59924586	NM_032043
<i>BRIP1</i>	Ex5	chr17	59926485	59926622	NM_032043
<i>BRIP1</i>	Ex4	chr17	59934414	59934597	NM_032043
<i>BRIP1</i>	Ex3	chr17	59937152	59937273	NM_032043
<i>BRIP1</i>	Ex2	chr17	59938803	59938905	NM_032043
<i>CBL</i>	Ex7	chr11	119148462	119148559	NM_005188
<i>CBL</i>	Ex8	chr11	119148871	119149012	NM_005188
<i>CBL</i>	Ex9	chr11	119149215	119149428	NM_005188

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
CHEK2	Ex15	chr22	29083880	29083979	NM_007194
CHEK2	Ex14	chr22	29085118	29085208	NM_007194
CHEK2	Ex13	chr22	29090015	29090110	NM_007194
CHEK2	Ex12	chr22	29091110	29091235	NM_007194
CHEK2	Ex11	chr22	29091693	29091866	NM_007194
CHEK2	Ex10	chr22	29092884	29092980	NM_007194
CHEK2	Ex9	chr22	29095821	29095930	NM_007194
CHEK2	Ex8	chr22	29099488	29099559	NM_007194
CHEK2	Ex7	chr22	29105989	29106052	NM_007194
CHEK2	Ex6	chr22	29107892	29108010	NM_007194
CHEK2	Ex5	chr22	29115378	29115478	NM_007194
CHEK2	5UTR	chr22	29117501	29117624	NM_001257387
CHEK2	Ex4	chr22	29120869	29120916	NM_001349956
CHEK2	Ex4	chr22	29120960	29121117	NM_007194
CHEK2	Ex3	chr22	29121226	29121360	NM_007194
CHEK2	Ex3	chr22	29126403	29126541	NM_001005735
CHEK2	Ex2	chr22	29130386	29130714	NM_007194
DNMT3A	Ex23	chr2	25457143	25457294	NM_022552
DNMT3A	Ex22	chr2	25458571	25458699	NM_022552
DNMT3A	Ex21	chr2	25459800	25459879	NM_022552
DNMT3A	Ex20	chr2	25461994	25462089	NM_022552
DNMT3A	Ex19	chr2	25463166	25463324	NM_022552
DNMT3A	Ex18	chr2	25463504	25463604	NM_022552
DNMT3A	Ex17	chr2	25464426	25464581	NM_022552
DNMT3A	Ex16	chr2	25466762	25466856	NM_022552
DNMT3A	Ex15	chr2	25467019	25467212	NM_022552
DNMT3A	Ex14	chr2	25467404	25467526	NM_022552
DNMT3A	Ex13	chr2	25468117	25468206	NM_022552
DNMT3A	Ex12	chr2	25468884	25468938	NM_022552
DNMT3A	Ex11	chr2	25469024	25469183	NM_022552
DNMT3A	Ex10	chr2	25469484	25469650	NM_022552
DNMT3A	Ex9	chr2	25469915	25470032	NM_022552
DNMT3A	Ex8	chr2	25470455	25470623	NM_022552
DNMT3A	Ex7	chr2	25470901	25471126	NM_022552
DNMT3A	Ex2	chr2	25472521	25472598	NM_153759
DNMT3A	Ex1	chr2	25474776	25474968	NM_001320893
DNMT3A	Ex1	chr2	25475058	25475071	NM_153759
DNMT3A	Ex6	chr2	25497805	25497961	NM_022552
DNMT3A	Ex5	chr2	25498364	25498417	NM_022552

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
<i>DNMT3A</i>	Ex4	chr2	25505305	25505585	NM_022552
<i>DNMT3A</i>	Ex3	chr2	25523003	25523117	NM_022552
<i>DNMT3A</i>	Ex2	chr2	25536777	25536858	NM_022552
<i>EZH2</i>	Ex20	chr7	148504733	148504803	NM_004456
<i>EZH2</i>	Ex19	chr7	148506158	148506252	NM_004456
<i>EZH2</i>	Ex18	chr7	148506397	148506487	NM_004456
<i>EZH2</i>	Ex17	chr7	148507420	148507511	NM_004456
<i>EZH2</i>	Ex16	chr7	148508712	148508817	NM_004456
<i>EZH2</i>	Ex15	chr7	148511046	148511234	NM_004456
<i>EZH2</i>	Ex14	chr7	148512001	148512136	NM_004456
<i>EZH2</i>	Ex13	chr7	148512593	148512643	NM_004456
<i>EZH2</i>	Ex12	chr7	148513771	148513875	NM_004456
<i>EZH2</i>	Ex11	chr7	148514309	148514488	NM_004456
<i>EZH2</i>	Ex10	chr7	148514964	148515214	NM_004456
<i>EZH2</i>	Ex9	chr7	148516683	148516784	NM_004456
<i>EZH2</i>	Ex8	chr7	148523541	148523729	NM_004456
<i>EZH2</i>	Ex7	chr7	148524251	148524363	NM_004456
<i>EZH2</i>	Ex6	chr7	148525827	148525977	NM_004456
<i>EZH2</i>	Ex5	chr7	148526815	148526945	NM_004456
<i>EZH2</i>	Ex4	chr7	148529721	148529847	NM_004456
<i>EZH2</i>	Ex3	chr7	148543557	148543695	NM_004456
<i>EZH2</i>	Ex2	chr7	148544269	148544395	NM_004456
<i>GATA2</i>	Ex6	chr3	128199857	128200166	NM_032638
<i>GATA2</i>	Ex5	chr3	128200657	128200792	NM_032638
<i>GATA2</i>	Ex4	chr3	128202698	128202853	NM_032638
<i>GATA2</i>	Ex3	chr3	128204565	128205216	NM_032638
<i>GATA2</i>	Ex2	chr3	128205641	128205879	NM_032638
<i>IDH1</i>	Ex4	chr2	209113088	209113389	NM_005896
<i>IDH2</i>	Ex4	chr15	90631814	90631984	NM_002168
<i>JAK2</i>	Ex12	chr9	5069920	5070057	NM_004972
<i>JAK2</i>	Ex14	chr9	5073693	5073790	NM_004972
<i>KRAS</i>	Ex3	chr12	25380163	25380351	NM_004985
<i>KRAS</i>	Ex2	chr12	25398203	25398323	NM_004985
<i>NRAS</i>	Ex3	chr1	115256416	115256604	NM_002524
<i>NRAS</i>	Ex2	chr1	115258666	115258786	NM_002524
<i>PALB2</i>	Ex13	chr16	23614775	23614995	NM_024675
<i>PALB2</i>	Ex12	chr16	23619180	23619338	NM_024675
<i>PALB2</i>	Ex11	chr16	23625320	23625417	NM_024675
<i>PALB2</i>	Ex10	chr16	23632678	23632804	NM_024675

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
<i>PALB2</i>	Ex9	chr16	23634285	23634456	NM_024675
<i>PALB2</i>	Ex8	chr16	23635325	23635420	NM_024675
<i>PALB2</i>	Ex7	chr16	23637552	23637723	NM_024675
<i>PALB2</i>	Ex6	chr16	23640520	23640601	NM_024675
<i>PALB2</i>	Ex5	chr16	23640956	23641795	NM_024675
<i>PALB2</i>	Ex4	chr16	23646178	23647660	NM_024675
<i>PALB2</i>	Ex3	chr16	23649166	23649278	NM_024675
<i>PALB2</i>	Ex2	chr16	23649386	23649455	NM_024675
<i>PALB2</i>	Ex1	chr16	23652426	23652483	NM_024675
<i>PHF6</i>	Ex2	chrX	133511643	133511790	NM_001015877
<i>PHF6</i>	Ex3	chrX	133512030	133512141	NM_001015877
<i>PHF6</i>	Ex4	chrX	133527526	133527669	NM_001015877
<i>PHF6</i>	Ex5	chrX	133527934	133527987	NM_001015877
<i>PHF6</i>	Ex6	chrX	133547516	133547692	NM_001015877
<i>PHF6</i>	Ex7	chrX	133547848	133548001	NM_001015877
<i>PHF6</i>	Ex8	chrX	133549041	133549155	NM_001015877
<i>PHF6</i>	Ex9	chrX	133551194	133551337	NM_001015877
<i>PHF6</i>	Ex10	chrX	133559226	133559365	NM_001015877
<i>PPM1D</i>	Ex6	chr17	58740351	58740918	NM_003620
<i>PTPN11</i>	Ex1	chr12	112856911	112856934	NM_002834
<i>PTPN11</i>	Ex2	chr12	112884075	112884207	NM_002834
<i>PTPN11</i>	Ex3	chr12	112888117	112888321	NM_002834
<i>PTPN11</i>	Ex4	chr12	112890994	112891196	NM_002834
<i>PTPN11</i>	Ex5	chr12	112892363	112892489	NM_002834
<i>PTPN11</i>	Ex6	chr12	112893749	112893872	NM_002834
<i>PTPN11</i>	Ex7	chr12	112910743	112910849	NM_002834
<i>PTPN11</i>	Ex8	chr12	112915450	112915539	NM_002834
<i>PTPN11</i>	Ex9	chr12	112915656	112915824	NM_002834
<i>PTPN11</i>	Ex10	chr12	112919873	112920014	NM_002834
<i>PTPN11</i>	Ex11	chr12	112924274	112924438	NM_002834
<i>PTPN11</i>	Ex12	chr12	112926242	112926319	NM_002834
<i>PTPN11</i>	Ex13	chr12	112926823	112926984	NM_002834
<i>PTPN11</i>	Ex14	chr12	112939943	112940065	NM_002834
<i>PTPN11</i>	Ex15	chr12	112942494	112942573	NM_002834
<i>RAD21</i>	Ex14	chr8	117859734	117859935	NM_006265
<i>RAD21</i>	Ex13	chr8	117861180	117861273	NM_006265
<i>RAD21</i>	Ex12	chr8	117862852	117863011	NM_006265
<i>RAD21</i>	Ex11	chr8	117864182	117864340	NM_006265
<i>RAD21</i>	Ex10	chr8	117864783	117864952	NM_006265

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
<i>RAD21</i>	Ex9	chr8	117866479	117866712	NM_006265
<i>RAD21</i>	Ex8	chr8	117868400	117868532	NM_006265
<i>RAD21</i>	Ex7	chr8	117868880	117869015	NM_006265
<i>RAD21</i>	Ex6	chr8	117869501	117869717	NM_006265
<i>RAD21</i>	Ex5	chr8	117870586	117870702	NM_006265
<i>RAD21</i>	Ex4	chr8	117874075	117874184	NM_006265
<i>RAD21</i>	Ex3	chr8	117875364	117875503	NM_006265
<i>RAD21</i>	Ex2	chr8	117878820	117878973	NM_006265
<i>RAD51C</i>	Ex1	chr17	56770000	56770154	NM_058216
<i>RAD51C</i>	Ex2	chr17	56772287	56772555	NM_058216
<i>RAD51C</i>	Ex3	chr17	56774049	56774225	NM_058216
<i>RAD51C</i>	Ex4	chr17	56780552	56780695	NM_058216
<i>RAD51C</i>	Ex5	chr17	56787215	56787356	NM_058216
<i>RAD51C</i>	Ex6	chr17	56798102	56798178	NM_058216
<i>RAD51C</i>	Ex7	chr17	56801396	56801466	NM_058216
<i>RAD51C</i>	Ex8	chr17	56809840	56809910	NM_058216
<i>RAD51C</i>	Ex9	chr17	56811474	56811588	NM_058216
<i>RAD51D</i>	Ex10	chr17	33427967	33428060	NM_002878
<i>RAD51D</i>	Ex9	chr17	33428215	33428389	NM_002878
<i>RAD51D</i>	Ex8	chr17	33430268	33430348	NM_002878
<i>RAD51D</i>	Ex7	chr17	33430468	33430568	NM_002878
<i>RAD51D</i>	Ex6	chr17	33433400	33433505	NM_002878
<i>RAD51D</i>	Ex5	chr17	33434002	33434146	NM_002878
<i>RAD51D</i>	Ex4	chr17	33434380	33434471	NM_002878
<i>RAD51D</i>	Ex3	chr17	33443873	33444061	NM_001142571
<i>RAD51D</i>	Ex3	chr17	33445515	33445643	NM_002878
<i>RAD51D</i>	Ex2	chr17	33446125	33446196	NM_002878
<i>RAD51D</i>	Ex1	chr17	33446546	33446637	NM_002878
<i>RUNX1</i>	Ex9	chr21	36164427	36164912	NM_001754
<i>RUNX1</i>	Ex8	chr21	36171593	36171764	NM_001754
<i>RUNX1</i>	Ex5	chr21	36193960	36193998	NM_001122607
<i>RUNX1</i>	Ex7	chr21	36206702	36206903	NM_001754
<i>RUNX1</i>	Ex6	chr21	36231766	36231880	NM_001754
<i>RUNX1</i>	Ex5	chr21	36252849	36253015	NM_001754
<i>RUNX1</i>	Ex4	chr21	36259135	36259398	NM_001754
<i>RUNX1</i>	Ex3	chr21	36265217	36265265	NM_001754
<i>RUNX1</i>	Ex2	chr21	36421134	36421201	NM_001754
<i>SETBP1</i>	Ex4	chr18	42529841	42533310	NM_015559

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Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
<i>SF3B1</i>	Ex16	chr2	198266461	198266617	NM_012433
<i>SF3B1</i>	Ex15	chr2	198266704	198266859	NM_012433
<i>SF3B1</i>	Ex14	chr2	198267275	198267555	NM_012433
<i>SF3B1</i>	Ex13	chr2	198267668	198267764	NM_012433
<i>SMC1A</i>	Ex25	chrX	53407019	53407112	NM_006306
<i>SMC1A</i>	Ex24	chrX	53407536	53407656	NM_006306
<i>SMC1A</i>	Ex23	chrX	53407934	53408013	NM_006306
<i>SMC1A</i>	Ex22	chrX	53409148	53409309	NM_006306
<i>SMC1A</i>	Ex21	chrX	53409422	53409586	NM_006306
<i>SMC1A</i>	Ex20	chrX	53410013	53410179	NM_006306
<i>SMC1A</i>	Ex19	chrX	53421693	53421813	NM_006306
<i>SMC1A</i>	Ex18	chrX	53423142	53423305	NM_006306
<i>SMC1A</i>	Ex17	chrX	53423387	53423542	NM_006306
<i>SMC1A</i>	Ex16	chrX	53426506	53426657	NM_006306
<i>SMC1A</i>	Ex15	chrX	53430493	53430609	NM_006306
<i>SMC1A</i>	Ex14	chrX	53430704	53430830	NM_006306
<i>SMC1A</i>	Ex13	chrX	53431939	53432086	NM_006306
<i>SMC1A</i>	Ex12	chrX	53432172	53432328	NM_006306
<i>SMC1A</i>	Ex11	chrX	53432420	53432609	NM_006306
<i>SMC1A</i>	Ex10	chrX	53432698	53432893	NM_006306
<i>SMC1A</i>	Ex9	chrX	53435988	53436205	NM_006306
<i>SMC1A</i>	Ex8	chrX	53436347	53436439	NM_006306
<i>SMC1A</i>	Ex7	chrX	53438706	53438856	NM_006306
<i>SMC1A</i>	Ex6	chrX	53438940	53439208	NM_006306
<i>SMC1A</i>	Ex5	chrX	53439845	53440093	NM_006306
<i>SMC1A</i>	Ex4	chrX	53440177	53440390	NM_006306
<i>SMC1A</i>	Ex3	chrX	53441702	53441824	NM_006306
<i>SMC1A</i>	Ex2	chrX	53441925	53442123	NM_006306
<i>SMC1A</i>	Ex2	chrX	53448840	53448892	NM_001281463
<i>SMC1A</i>	Ex1	chrX	53449436	53449554	NM_006306
<i>SMC3</i>	Ex1	chr10	112327570	112327594	NM_005445
<i>SMC3</i>	Ex2	chr10	112328691	112328776	NM_005445
<i>SMC3</i>	Ex3	chr10	112333460	112333508	NM_005445
<i>SMC3</i>	Ex4	chr10	112335089	112335166	NM_005445
<i>SMC3</i>	Ex5	chr10	112337174	112337255	NM_005445
<i>SMC3</i>	Ex6	chr10	112337588	112337677	NM_005445
<i>SMC3</i>	Ex7	chr10	112338381	112338469	NM_005445
<i>SMC3</i>	Ex8	chr10	112340657	112340784	NM_005445
<i>SMC3</i>	Ex9	chr10	112341676	112341861	NM_005445

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
SMC3	Ex10	chr10	112342315	112342405	NM_005445
SMC3	Ex11	chr10	112343137	112343311	NM_005445
SMC3	Ex12	chr10	112343594	112343725	NM_005445
SMC3	Ex13	chr10	112343936	112344159	NM_005445
SMC3	Ex14	chr10	112349358	112349471	NM_005445
SMC3	Ex15	chr10	112349645	112349754	NM_005445
SMC3	Ex16	chr10	112350165	112350335	NM_005445
SMC3	Ex17	chr10	112350744	112350895	NM_005445
SMC3	Ex18	chr10	112352826	112352986	NM_005445
SMC3	Ex19	chr10	112356151	112356313	NM_005445
SMC3	Ex20	chr10	112357892	112358053	NM_005445
SMC3	Ex21	chr10	112359407	112359575	NM_005445
SMC3	Ex22	chr10	112360192	112360309	NM_005445
SMC3	Ex23	chr10	112360775	112360893	NM_005445
SMC3	Ex24	chr10	112361390	112361647	NM_005445
SMC3	Ex25	chr10	112361719	112361941	NM_005445
SMC3	Ex26	chr10	112362227	112362428	NM_005445
SMC3	Ex27	chr10	112362578	112362765	NM_005445
SMC3	Ex28	chr10	112362937	112363053	NM_005445
SMC3	Ex29	chr10	112363984	112364065	NM_005445
SRSF2	Ex1	chr17	74732876	74733247	NM_001195427
STAG2	Ex3	chrX	123156473	123156526	NM_001042750
STAG2	Ex4	chrX	123159685	123159773	NM_001042750
STAG2	Ex5	chrX	123164806	123164980	NM_001042750
STAG2	Ex6	chrX	123171372	123171478	NM_001042750
STAG2	Ex7	chrX	123176414	123176500	NM_001042750
STAG2	Ex8	chrX	123179009	123179223	NM_001042750
STAG2	Ex9	chrX	123181199	123181360	NM_001042750
STAG2	Ex10	chrX	123182850	123182933	NM_001042750
STAG2	Ex11	chrX	123184031	123184164	NM_001042750
STAG2	Ex12	chrX	123184966	123185074	NM_001042750
STAG2	Ex13	chrX	123185160	123185249	NM_001042750
STAG2	Ex14	chrX	123189973	123190090	NM_001042750
STAG2	Ex15	chrX	123191711	123191832	NM_001042750
STAG2	Ex16	chrX	123195069	123195196	NM_001042750
STAG2	Ex17	chrX	123195616	123195729	NM_001042750
STAG2	Ex18	chrX	123196747	123196849	NM_001042750
STAG2	Ex19	chrX	123196961	123197060	NM_001042750
STAG2	Ex20	chrX	123197693	123197906	NM_001042750

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
STAG2	Ex21	chrX	123199721	123199801	NM_001042750
STAG2	Ex22	chrX	123200020	123200117	NM_001042750
STAG2	Ex23	chrX	123200201	123200291	NM_001042750
STAG2	Ex24	chrX	123202409	123202511	NM_001042750
STAG2	Ex25	chrX	123204994	123205178	NM_001042750
STAG2	Ex26	chrX	123210177	123210326	NM_001042750
STAG2	Ex27	chrX	123211802	123211913	NM_001042750
STAG2	Ex28	chrX	123215225	123215383	NM_001042750
STAG2	Ex29	chrX	123217266	123217404	NM_001042750
STAG2	Ex30	chrX	123220392	123220625	NM_001042750
STAG2	Ex31	chrX	123224420	123224619	NM_001042750
STAG2	Ex32	chrX	123224699	123224819	NM_001042750
STAG2	Ex33	chrX	123227863	123227999	NM_001042750
STAG2	Ex34	chrX	123229217	123229304	NM_001042750
STAG2	Ex35	chrX	123234419	123234452	NM_001042750
TET2	Ex3	chr4	106155095	106158513	NM_001127208
TET2	Ex4	chr4	106162491	106162591	NM_001127208
TET2	Ex5	chr4	106163986	106164089	NM_001127208
TET2	Ex6	chr4	106164722	106164940	NM_001127208
TET2	Ex7	chr4	106180771	106180931	NM_001127208
TET2	Ex8	chr4	106182911	106183010	NM_001127208
TET2	Ex9	chr4	106190762	106190909	NM_001127208
TET2	Ex10	chr4	106193716	106194080	NM_001127208
TET2	Ex11	chr4	106196200	106197681	NM_001127208
TP53	Ex11	chr17	7572922	7573013	NM_000546
TP53	Ex10	chr17	7573922	7574038	NM_000546
TP53	Ex10	chr17	7576532	7576589	NM_001126113
TP53	Ex10	chr17	7576620	7576662	NM_001126114
TP53	Ex9	chr17	7576848	7576931	NM_000546
TP53	Ex8	chr17	7577014	7577160	NM_000546
TP53	Ex7	chr17	7577494	7577613	NM_000546
TP53	Ex6	chr17	7578172	7578294	NM_000546
TP53	Ex5	chr17	7578366	7578559	NM_000546
TP53	Ex4	chr17	7579307	7579595	NM_000546
TP53	Ex3	chr17	7579695	7579726	NM_000546
TP53	Ex2	chr17	7579834	7579917	NM_000546
U2AF1	Ex6	chr21	44514760	44514903	NM_006758
U2AF1	Ex2	chr21	44524420	44524517	NM_006758

Targeted Genes and Methodology Details for High Sensitivity Clonal Hematopoiesis Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
ZRSR2	Ex1	chrX	15808614	15808664	NM_005089
ZRSR2	Ex2	chrX	15809052	15809141	NM_005089
ZRSR2	Ex3	chrX	15817990	15818081	NM_005089
ZRSR2	Ex4	chrX	15821806	15821924	NM_005089
ZRSR2	Ex5	chrX	15822229	15822325	NM_005089
ZRSR2	Ex6	chrX	15826351	15826399	NM_005089
ZRSR2	Ex7	chrX	15827318	15827446	NM_005089
ZRSR2	Ex8	chrX	15833795	15834018	NM_005089
ZRSR2	Ex9	chrX	15836705	15836770	NM_005089
ZRSR2	Ex10	chrX	15838325	15838444	NM_005089
ZRSR2	Ex11	chrX	15840849	15841370	NM_005089