



The following applies to MCOCP / MayoComplete Ovarian, Fallopian Tube, and Peritoneal Cancer Panel, Next-Generation Sequencing. Next-generation sequencing (NGS) is performed to test for the presence of microsatellite instability, 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 reference method, such as Sanger sequencing. Default reportable range offset is +/-2 base pairs around each targeted exon region.

Genomic Build: GRCh37 (hg19) unless otherwise specified.

As a result of technical limitations of the assay (including regions of homology, high GC content, and repetitive sequences), there are regions of some genes that cannot be effectively evaluated. Refer to 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.

Gene	Exon	Chromosome	Genomic Start	Genomic End	Transcript
ATM	Ex2	chr11	108098350	108098425	NM_000051
ATM	Ex3	chr11	108098501	108098617	NM_000051
ATM	Ex4	chr11	108099903	108100052	NM_000051
ATM	Ex5	chr11	108106395	108106563	NM_000051
ATM	Ex6	chr11	108114678	108114847	NM_000051
ATM	Ex7	chr11	108115513	108115755	NM_000051
ATM	Ex8	chr11	108117689	108117856	NM_000051
ATM	Ex9	chr11	108119658	108119831	NM_000051
ATM	Ex10	chr11	108121426	108121801	NM_000051
ATM	Ex11	chr11	108122562	108122760	NM_000051
ATM	Ex12	chr11	108123542	108123641	NM_000051
ATM	Ex13	chr11	108124539	108124768	NM_000051
ATM	Ex14	chr11	108126940	108127069	NM_000051
ATM	Ex15	chr11	108128206	108128335	NM_000051
ATM	Ex16	chr11	108129711	108129804	NM_000051
ATM	Ex17	chr11	108137896	108138071	NM_000051
ATM	Ex18	chr11	108139135	108139338	NM_000051
ATM	Ex19	chr11	108141789	108141875	NM_000051
ATM	Ex20	chr11	108141976	108142135	NM_000051
ATM	Ex21	chr11	108143257	108143336	NM_000051
ATM	Ex22	chr11	108143447	108143581	NM_000051
ATM	Ex23	chr11	108150216	108150337	NM_000051
ATM	Ex24	chr11	108151720	108151897	NM_000051
ATM	Ex25	chr11	108153435	108153558	NM_000051
ATM	Ex26	chr11	108154952	108155202	NM_000051
ATM	Ex27	chr11	108158325	108158444	NM_000051
ATM	Ex28	chr11	108159702	108159832	NM_000051
ATM	Ex29	chr11	108160327	108160530	NM_000051
ATM	Ex30	chr11	108163344	108163522	NM_000051
ATM	Ex31	chr11	108164038	108164206	NM_000051

Targeted Genes and Methodology Details

for MayoComplete Ovarian Cancer Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic End	Transcript
ATM	Ex32	chr11	108165652	108165788	NM_000051
ATM	Ex33	chr11	108168012	108168111	NM_000051
ATM	Ex34	chr11	108170439	108170614	NM_000051
ATM	Ex35	chr11	108172373	108172518	NM_000051
ATM	Ex36	chr11	108173578	108173758	NM_000051
ATM	Ex37	chr11	108175400	108175581	NM_000051
ATM	Ex38	chr11	108178622	108178713	NM_000051
ATM	Ex39	chr11	108180885	108181044	NM_000051
ATM	Ex40	chr11	108183136	108183227	NM_000051
ATM	Ex41	chr11	108186548	108186640	NM_000051
ATM	Ex42	chr11	108186736	108186842	NM_000051
ATM	Ex43	chr11	108188098	108188250	NM_000051
ATM	Ex44	chr11	108190679	108190787	NM_000051
ATM	Ex45	chr11	108192026	108192149	NM_000051
ATM	Ex46	chr11	108196035	108196273	NM_000051
ATM	Ex47	chr11	108196783	108196954	NM_000051
ATM	Ex48	chr11	108198370	108198487	NM_000051
ATM	Ex49	chr11	108199746	108199967	NM_000051
ATM	Ex50	chr11	108200939	108201150	NM_000051
ATM	Ex51	chr11	108202169	108202286	NM_000051
ATM	Ex52	chr11	108202604	108202766	NM_000051
ATM	Ex53	chr11	108203487	108203629	NM_000051
ATM	Ex54	chr11	108204611	108204697	NM_000051
ATM	Ex55	chr11	108205694	108205838	NM_000051
ATM	Ex56	chr11	108206570	108206690	NM_000051
ATM	Ex57	chr11	108213947	108214100	NM_000051
ATM	Ex58	chr11	108216468	108216637	NM_000051
ATM	Ex59	chr11	108218004	108218094	NM_000051
ATM	Ex60	chr11	108224491	108224609	NM_000051
ATM	Ex61	chr11	108225536	108225603	NM_000051
ATM	Ex62	chr11	108235807	108235947	NM_000051
ATM	Ex63	chr11	108236050	108236237	NM_000051
ATR	Ex1	chr3	142297486	142297548	NM_001184
ATR	Ex2	chr3	142286903	142286998	NM_001184
ATR	Ex3	chr3	142284961	142285105	NM_001184
ATR	Ex4	chr3	142281072	142281953	NM_001184
ATR	Ex5	chr3	142280083	142280265	NM_001184
ATR	Ex6	chr3	142279103	142279298	NM_001184

Targeted Genes and Methodology Details
for MayoComplete Ovarian Cancer Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic End	Transcript
ATR	Ex7	chr3	142278091	142278285	NM_001184
ATR	Ex8	chr3	142277464	142277620	NM_001184
ATR	Ex9	chr3	142275223	142275419	NM_001184
ATR	Ex10	chr3	142274717	142274983	NM_001184
ATR	Ex11	chr3	142272665	142272859	NM_001184
ATR	Ex12	chr3	142272480	142272584	NM_001184
ATR	Ex13	chr3	142272067	142272242	NM_001184
ATR	Ex14	chr3	142268972	142269146	NM_001184
ATR	Ex15	chr3	142268319	142268517	NM_001184
ATR	Ex16	chr3	142266565	142266754	NM_001184
ATR	Ex17	chr3	142261505	142261601	NM_001184
ATR	Ex18	chr3	142259744	142259878	NM_001184
ATR	Ex19	chr3	142257322	142257469	NM_001184
ATR	Ex20	chr3	142254948	142255045	NM_001184
ATR	Ex21	chr3	142253920	142254049	NM_001184
ATR	Ex22	chr3	142242833	142243043	NM_001184
ATR	Ex23	chr3	142241568	142241685	NM_001184
ATR	Ex24	chr3	142238509	142238628	NM_001184
ATR	Ex25	chr3	142234235	142234359	NM_001184
ATR	Ex26	chr3	142232341	142232482	NM_001184
ATR	Ex27	chr3	142231100	142231314	NM_001184
ATR	Ex28	chr3	142226771	142226953	NM_001184
ATR	Ex29	chr3	142223979	142224147	NM_001184
ATR	Ex30	chr3	142222202	142222297	NM_001184
ATR	Ex31	chr3	142218467	142218562	NM_001184
ATR	Ex32	chr3	142217437	142217618	NM_001184
ATR	Ex33	chr3	142215853	142216036	NM_001184
ATR	Ex34	chr3	142215201	142215364	NM_001184
ATR	Ex35	chr3	142211972	142212155	NM_001184
ATR	Ex36	chr3	142203980	142204126	NM_001184
ATR	Ex37	chr3	142188926	142189027	NM_001184
ATR	Ex38	chr3	142188177	142188413	NM_001184
ATR	Ex39	chr3	142186774	142186912	NM_001184
ATR	Ex40	chr3	142185164	142185377	NM_001184
ATR	Ex41	chr3	142183937	142184084	NM_001184
ATR	Ex42	chr3	142180780	142180934	NM_001184
ATR	Ex43	chr3	142178067	142178227	NM_001184
ATR	Ex44	chr3	142177798	142177955	NM_001184

Targeted Genes and Methodology Details

for MayoComplete Ovarian Cancer Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic End	Transcript
<i>ATR</i>	Ex45	chr3	142176444	142176599	NM_001184
<i>ATR</i>	Ex46	chr3	142171968	142172077	NM_001184
<i>ATR</i>	Ex47	chr3	142168269	142168446	NM_001184
<i>BARD1</i>	Ex1	chr2	215674134	215674295	NM_000465
<i>BARD1</i>	Ex2	chr2	215661783	215661843	NM_000465
<i>BARD1</i>	Ex3	chr2	215657019	215657171	NM_000465
<i>BARD1</i>	Ex4	chr2	215645282	215646235	NM_000465
<i>BARD1</i>	Ex5	chr2	215633954	215634038	NM_000465
<i>BARD1</i>	Ex6	chr2	215632204	215632380	NM_000465
<i>BARD1</i>	Ex7	chr2	215617169	215617281	NM_000465
<i>BARD1</i>	Ex8	chr2	215610444	215610580	NM_000465
<i>BARD1</i>	Ex9	chr2	215609789	215609885	NM_000465
<i>BARD1</i>	Ex10	chr2	215595133	215595234	NM_000465
<i>BARD1</i>	Ex11	chr2	215593398	215593734	NM_000465
<i>BRCA1</i>	Ex2	chr17	41276032	41276115	NM_007294
<i>BRCA1</i>	Ex3	chr17	41267741	41267798	NM_007294
<i>BRCA1</i>	Ex4	chr17	41258471	41258552	NM_007294
<i>BRCA1</i>	Ex5	chr17	41256883	41256975	NM_007294
<i>BRCA1</i>	Ex6	chr17	41256137	41256280	NM_007294
<i>BRCA1</i>	Ex7	chr17	41251790	41251899	NM_007294
<i>BRCA1</i>	Ex8	chr17	41249259	41249308	NM_007294
<i>BRCA1</i>	Ex9	chr17	41247861	41247941	NM_007294
<i>BRCA1</i>	Ex10	chr17	41243450	41246879	NM_007294
<i>BRCA1</i>	Ex11	chr17	41242959	41243051	NM_007294
<i>BRCA1</i>	Ex12	chr17	41234419	41234594	NM_007294
<i>BRCA1</i>	Ex13	chr17	41228503	41228633	NM_007294
<i>BRCA1</i>	Ex14	chr17	41226346	41226540	NM_007294
<i>BRCA1</i>	Ex15	chr17	41222943	41223257	NM_007294
<i>BRCA1</i>	Ex16	chr17	41219623	41219714	NM_007294
<i>BRCA1</i>	Ex17	chr17	41215889	41215970	NM_007294
<i>BRCA1</i>	Ex18	chr17	41215348	41215392	NM_007294
<i>BRCA1</i>	Ex19	chr17	41209067	41209154	NM_007294
<i>BRCA1</i>	Ex20	chr17	41203078	41203136	NM_007294
<i>BRCA1</i>	Ex21	chr17	41201136	41201213	NM_007294
<i>BRCA1</i>	Ex22	chr17	41199658	41199722	NM_007294
<i>BRCA1</i>	Ex23	chr17	41197693	41197821	NM_007294
<i>BRCA2</i>	Ex2	chr13	32890596	32890666	NM_000059
<i>BRCA2</i>	Ex3	chr13	32893212	32893464	NM_000059
<i>BRCA2</i>	Ex4	chr13	32899211	32899323	NM_000059

Targeted Genes and Methodology Details

for MayoComplete Ovarian Cancer Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic End	Transcript
BRCA2	Ex5	chr13	32900236	32900289	NM_000059
BRCA2	Ex6	chr13	32900377	32900421	NM_000059
BRCA2	Ex7	chr13	32900634	32900752	NM_000059
BRCA2	Ex8	chr13	32903578	32903631	NM_000059
BRCA2	Ex9	chr13	32905054	32905169	NM_000059
BRCA2	Ex10	chr13	32906407	32907526	NM_000059
BRCA2	Ex11	chr13	32910400	32915335	NM_000059
BRCA2	Ex12	chr13	32918693	32918792	NM_000059
BRCA2	Ex13	chr13	32920962	32921035	NM_000059
BRCA2	Ex14	chr13	32928996	32929427	NM_000059
BRCA2	Ex15	chr13	32930563	32930748	NM_000059
BRCA2	Ex16	chr13	32931877	32932068	NM_000059
BRCA2	Ex17	chr13	32936658	32936832	NM_000059
BRCA2	Ex18	chr13	32937314	32937672	NM_000059
BRCA2	Ex19	chr13	32944537	32944696	NM_000059
BRCA2	Ex20	chr13	32945091	32945239	NM_000059
BRCA2	Ex21	chr13	32950805	32950930	NM_000059
BRCA2	Ex22	chr13	32953452	32953654	NM_000059
BRCA2	Ex23	chr13	32953885	32954052	NM_000059
BRCA2	Ex24	chr13	32954142	32954284	NM_000059
BRCA2	Ex25	chr13	32968824	32969072	NM_000059
BRCA2	Ex26	chr13	32971033	32971183	NM_000059
BRCA2	Ex27	chr13	32972297	32972909	NM_000059
BRIP1	Ex2	chr17	59938806	59938902	NM_032043
BRIP1	Ex3	chr17	59937155	59937270	NM_032043
BRIP1	Ex4	chr17	59934417	59934594	NM_032043
BRIP1	Ex5	chr17	59926488	59926619	NM_032043
BRIP1	Ex6	chr17	59924460	59924583	NM_032043
BRIP1	Ex7	chr17	59885826	59886120	NM_032043
BRIP1	Ex8	chr17	59878612	59878837	NM_032043
BRIP1	Ex9	chr17	59876459	59876662	NM_032043
BRIP1	Ex10	chr17	59870956	59871092	NM_032043
BRIP1	Ex11	chr17	59861629	59861787	NM_032043
BRIP1	Ex12	chr17	59858199	59858368	NM_032043
BRIP1	Ex13	chr17	59857620	59857764	NM_032043
BRIP1	Ex14	chr17	59853760	59853925	NM_032043
BRIP1	Ex15	chr17	59821791	59821954	NM_032043
BRIP1	Ex16	chr17	59820372	59820497	NM_032043
BRIP1	Ex17	chr17	59793310	59793426	NM_032043

Targeted Genes and Methodology Details
for MayoComplete Ovarian Cancer Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic End	Transcript
BRIP1	Ex18	chr17	59770789	59770875	NM_032043
BRIP1	Ex19	chr17	59763195	59763528	NM_032043
BRIP1	Ex20	chr17	59760655	59761503	NM_032043
CDK12	Ex1	chr17	37618323	37619372	NM_016507
CDK12	Ex2	chr17	37627130	37628018	NM_016507
CDK12	Ex3	chr17	37646808	37646988	NM_016507
CDK12	Ex4	chr17	37649002	37649145	NM_016507
CDK12	Ex5	chr17	37650775	37650949	NM_016507
CDK12	Ex6	chr17	37657501	37657694	NM_016507
CDK12	Ex7	chr17	37665956	37666016	NM_016507
CDK12	Ex8	chr17	37667780	37667885	NM_016507
CDK12	Ex9	chr17	37671982	37672063	NM_016507
CDK12	Ex10	chr17	37673691	37673811	NM_016507
CDK12	Ex11	chr17	37676207	37676342	NM_016507
CDK12	Ex12	chr17	37680925	37681140	NM_016507
CDK12	Ex13	chr17	37682115	37682571	NM_016507
CDK12	Ex14	chr17	37686855	37687571	NM_016507
MLH1	Ex1	chr3	37035037	37035156	NM_000249
MLH1	Ex2	chr3	37038108	37038202	NM_000249
MLH1	Ex3	chr3	37042444	37042546	NM_000249
MLH1	Ex4	chr3	37045890	37045967	NM_000249
MLH1	Ex5	chr3	37048480	37048556	NM_000249
MLH1	Ex6	chr3	37050303	37050398	NM_000249
MLH1	Ex7	chr3	37053309	37053355	NM_000249
MLH1	Ex8	chr3	37053500	37053592	NM_000249
MLH1	Ex9	chr3	37055921	37056037	NM_000249
MLH1	Ex10	chr3	37058995	37059092	NM_000249
MLH1	Ex11	chr3	37061799	37061956	NM_000249
MLH1	Ex12	chr3	37067126	37067500	NM_000249
MLH1	Ex13	chr3	37070273	37070425	NM_000249
MLH1	Ex14	chr3	37081675	37081787	NM_000249
MLH1	Ex15	chr3	37083757	37083824	NM_000249
MLH1	Ex16	chr3	37089008	37089176	NM_000249
MLH1	Ex17	chr3	37090006	37090102	NM_000249
MLH1	Ex18	chr3	37090393	37090510	NM_000249
MLH1	Ex19	chr3	37091975	37092146	NM_000249
MSH2	Ex1	chr2	47630329	47630543	NM_000251
MSH2	Ex2	chr2	47635538	47635696	NM_000251
MSH2	Ex3	chr2	47637231	47637513	NM_000251

Targeted Genes and Methodology Details
for MayoComplete Ovarian Cancer Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic End	Transcript
MSH2	Ex4	chr2	47639551	47639701	NM_000251
MSH2	Ex5	chr2	47641406	47641559	NM_000251
MSH2	Ex6	chr2	47643433	47643570	NM_000251
MSH2	Ex7	chr2	47656879	47657082	NM_000251
MSH2	Ex8	chr2	47672685	47672798	NM_000251
MSH2	Ex9	chr2	47690168	47690295	NM_000251
MSH2	Ex10	chr2	47693795	47693949	NM_000251
MSH2	Ex11	chr2	47698102	47698203	NM_000251
MSH2	Ex12	chr2	47702162	47702411	NM_000251
MSH2	Ex13	chr2	47703504	47703712	NM_000251
MSH2	Ex14	chr2	47705409	47705660	NM_000251
MSH2	Ex15	chr2	47707833	47708012	NM_000251
MSH2	Ex16	chr2	47709916	47710090	NM_000251
MSH6	Ex1	chr2	48010371	48010634	NM_000179
MSH6	Ex2	chr2	48018064	48018264	NM_000179
MSH6	Ex3	chr2	48023031	48023204	NM_000179
MSH6	Ex4	chr2	48025748	48028296	NM_000179
MSH6	Ex5	chr2	48030557	48030826	NM_000179
MSH6	Ex6	chr2	48032047	48032168	NM_000179
MSH6	Ex7	chr2	48032755	48032848	NM_000179
MSH6	Ex8	chr2	48033341	48033499	NM_000179
MSH6	Ex9	chr2	48033589	48033792	NM_000179
MSH6	Ex10	chr2	48033916	48034001	NM_000179
PALB2	Ex1	chr16	23652429	23652480	NM_024675
PALB2	Ex2	chr16	23649389	23649452	NM_024675
PALB2	Ex3	chr16	23649169	23649275	NM_024675
PALB2	Ex4	chr16	23646181	23647657	NM_024675
PALB2	Ex5	chr16	23640959	23641792	NM_024675
PALB2	Ex6	chr16	23640523	23640598	NM_024675
PALB2	Ex7	chr16	23637555	23637720	NM_024675
PALB2	Ex8	chr16	23635328	23635417	NM_024675
PALB2	Ex9	chr16	23634288	23634453	NM_024675
PALB2	Ex10	chr16	23632681	23632801	NM_024675
PALB2	Ex11	chr16	23625323	23625414	NM_024675
PALB2	Ex12	chr16	23619183	23619335	NM_024675
PALB2	Ex13	chr16	23614778	23614992	NM_024675
PMS2	Ex1	chr7	6048626	6048652	NM_000535
PMS2	Ex2	chr7	6045521	6045664	NM_000535
PMS2	Ex3	chr7	6043601	6043691	NM_000535

Targeted Genes and Methodology Details
for MayoComplete Ovarian Cancer Panel (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic End	Transcript
<i>PMS2</i>	Ex4	chr7	6043319	6043425	NM_000535
<i>PMS2</i>	Ex5	chr7	6042082	6042269	NM_000535
<i>PMS2</i>	Ex6	chr7	6038737	6038908	NM_000535
<i>PMS2</i>	Ex7	chr7	6036955	6037056	NM_000535
<i>PMS2</i>	Ex8	chr7	6035163	6035266	NM_000535
<i>PMS2</i>	Ex9	chr7	6031602	6031690	NM_000535
<i>PMS2</i>	Ex10	chr7	6029429	6029588	NM_000535
<i>PMS2</i>	Ex11	chr7	6026388	6027253	NM_000535
<i>PMS2</i>	Ex12	chr7	6022453	6022624	NM_000535
<i>PMS2</i>	Ex13	chr7	6018225	6018329	NM_000535
<i>PMS2</i>	Ex14	chr7	6017217	6017390	NM_000535
<i>PMS2</i>	Ex15	chr7	6013028	6013175	NM_000535
<i>RAD51C</i>	Ex1	chr17	56770003	56770151	NM_058216
<i>RAD51C</i>	Ex2	chr17	56772290	56772552	NM_058216
<i>RAD51C</i>	Ex3	chr17	56774052	56774222	NM_058216
<i>RAD51C</i>	Ex4	chr17	56780555	56780692	NM_058216
<i>RAD51C</i>	Ex5	chr17	56787218	56787353	NM_058216
<i>RAD51C</i>	Ex6	chr17	56798105	56798175	NM_058216
<i>RAD51C</i>	Ex7	chr17	56801399	56801463	NM_058216
<i>RAD51C</i>	Ex8	chr17	56809843	56809907	NM_058216
<i>RAD51C</i>	Ex9	chr17	56811477	56811585	NM_058216
<i>RAD51D</i>	Ex1	chr17	33446549	33446634	NM_002878
<i>RAD51D</i>	Ex2	chr17	33446128	33446193	NM_002878
<i>RAD51D</i>	Ex3	chr17	33445518	33445640	NM_002878
<i>RAD51D</i>	Ex4	chr17	33434383	33434468	NM_002878
<i>RAD51D</i>	Ex5	chr17	33434005	33434143	NM_002878
<i>RAD51D</i>	Ex6	chr17	33433403	33433502	NM_002878
<i>RAD51D</i>	Ex7	chr17	33430471	33430565	NM_002878
<i>RAD51D</i>	Ex8	chr17	33430271	33430345	NM_002878
<i>RAD51D</i>	Ex9	chr17	33428218	33428386	NM_002878
<i>RAD51D</i>	Ex10	chr17	33427970	33428057	NM_002878