



RNA-based next-generation sequencing is performed to evaluate 138 gene targets for the presence of somatic gene fusions. When appropriate, alterations detected are confirmed by an independent reference method, such as fluorescence in situ hybridization, reverse transcription polymerase chain reaction, or immunohistochemistry staining.

Genomic Build: GRCh37 (hg19) unless otherwise specified

This is a targeted assay and not all exons of each gene are covered by this test. This assay can detect novel fusions if the fusion contains a single gene target from the panel. 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 Rearrangement	5' Gene Partner Exons		3' Gene Partner Exons	
	5' Gene : 3' Gene	Reference Transcript	Exon/Intron	Reference Transcript
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 7	NM_002017.4	exon 5
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 7	NM_002017.4	exon 6
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 7	NM_002017.4	exon 7
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 7	NM_002017.4	exon 8
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 7	NM_002017.4	exon 9
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 8	NM_002017.4	exon 5
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 8	NM_002017.4	exon 6
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 9	NM_002017.4	exon 4
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 9	NM_002017.4	exon 7
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 10	NM_002017.4	exon 5
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 10	NM_002017.4	exon 6
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 10	NM_002017.4	exon 7
<i>EWSR1 : FLI1</i>	NM_005243.3	exon 10	NM_002017.4	exon 8
<i>EWSR1 : ERG</i>	NM_005243.3	exon 7	NM_001243429.1	exon 5
<i>EWSR1 : ERG</i>	NM_005243.3	exon 7	NM_001243429.1	exon 6
<i>EWSR1 : ERG</i>	NM_005243.3	exon 7	NM_001243429.1	exon 7
<i>EWSR1 : ERG</i>	NM_005243.3	exon 7	NM_001243429.1	exon 8
<i>EWSR1 : ERG</i>	NM_005243.3	exon 7	NM_001243429.1	exon 9
<i>EWSR1 : ERG</i>	NM_005243.3	exon 10	NM_001243429.1	exon 7
<i>EWSR1 : FEV</i>	NM_005243.3	exon 7	NM_017521.2	exon 2
<i>EWSR1 : FEV</i>	NM_005243.3	exon 10	NM_017521.2	exon 2
<i>EWSR1 : ETV1</i>	NM_005243.3	exon 7	NM_004956.3	exon 12
<i>EWSR1 : ETV1</i>	NM_005243.3	exon 7	NM_004956.3	exon 13
<i>EWSR1 : ETV4</i>	NM_005243.3	exon 7	NM_001986.2	exon 9
<i>EWSR1 : CREB1</i>	NM_005243.3	exon 7	NM_004379.4	exon 6
<i>FUS : FEV</i>	NM_004960.3	exon 10	NM_017521.2	exon 2
<i>FUS : ERG</i>	NM_004960.3	exon 5	NM_001243429.1	exon 6
<i>FUS : ERG</i>	NM_004960.3	exon 6*	NM_001243429.1	exon 9
<i>FUS : ERG</i>	NM_004960.3	exon 7	NM_001243429.1	exon 8

Targeted Genes Fusions and Methodology
Details for MayoComplete Sarcoma Panel (continued)

Gene Rearrangement	5' Gene Partner Exons		3' Gene Partner Exons	
	5' Gene : 3' Gene	Reference Transcript	Exon/Intron	Reference Transcript
<i>SS18 : SSX1</i>	NM_001007559.2	exon 10	NM_005635.3	exon 6
<i>SS18 : SSX2</i>	NM_001007559.2	exon 10	NM_003147.5	exon 6
<i>SS18 : SSX4</i>	NM_001007559.2	exon 10	NM_005636.3	exon 6
<i>SS18 : SSX4</i>	NM_001007559.2	exon 10	NM_005636.3	exon 7
<i>SS18L1 : SSX1</i>	NM_198935.2	exon 10	NM_005635.3	exon 6
<i>PAX3 : FOXO1</i>	NM_181457.3	exon 7	NM_002015.3	exon 2
<i>PAX7 : FOXO1</i>	NM_002584.2	exon 7	NM_002015.3	exon 2
<i>PRR12 : FOXO1</i>	NM_020719.2	exon 11	NM_002015.3	exon 2
<i>EWSR1 : WT1</i>	NM_005243.3	exon 7	NM_024424.3	exon 8
<i>EWSR1 : WT1</i>	NM_005243.3	exon 7	NM_024424.3	exon 9
<i>EWSR1 : WT1</i>	NM_005243.3	exon 8	NM_024424.3	exon 8
<i>EWSR1 : WT1</i>	NM_005243.3	exon 9	NM_024424.3	exon 8
<i>EWSR1 : WT1</i>	NM_005243.3	exon 10	NM_024424.3	exon 8
<i>HEY1 : NCOA2</i>	NM_012258.3	exon 4	NM_006540.3	exon 13
<i>HEY1 : NCOA2</i>	NM_012258.3	exon 4	NM_006540.3	exon 14
<i>IRF2BP2 : CDX1</i>	NM_182972.2	exon 1	NM_001804.2	exon 2
<i>NAB2 : STAT6</i>	NM_005967.3	exon 4	NM_001178078.1	exon 2
<i>NAB2 : STAT6</i>	NM_005967.3	exon 6	NM_001178078.1	exon 16
<i>NAB2 : STAT6</i>	NM_005967.3	exon 2	NM_001178078.1	exon 17
<i>CDH11 : USP6</i>	NM_001797.3	exon 1	NM_001304284.1	exon 9
<i>CDH11 : USP6</i>	NM_001797.3	exon 1	NM_001304284.1	exon 10
<i>CDH11 : USP6</i>	NM_001797.3	exon 2	NM_001304284.1	exon 10
<i>CDH11 : USP6</i>	NM_001797.3	intron 1*	NM_001304284.1	intron 8*
<i>CDH11 : USP6</i>	NM_001797.3	intron 1*	NM_001304284.1	intron 9*
<i>CDH11 : USP6</i>	NM_001797.3	intron 2*	NM_001304284.1	intron 8*
<i>CDH11 : USP6</i>	NM_001797.3	intron 2*	NM_001304284.1	intron 9*
<i>CDH11 : USP6</i>	NM_001797.3	intron 2*	NM_001304284.1	exon 5*
<i>MYH9 : USP6</i>	NM_002473.5	exon 1	NM_001304284.1	exon 9
<i>SRSF3 : USP6</i>	NM_003017.4	exon 1	NM_001304284.1	exon 9
<i>SRSF3 : USP6</i>	NM_003017.4	exon 1	NM_001304284.1	exon 10
<i>THRAP3 : USP6</i>	NM_005119.3	exon 1	NM_001304284.1	exon 9
<i>CNBP (ZNF9) : USP6</i>	NM_001127192.1	exon 1	NM_001304284.1	exon 9
<i>CNBP (ZNF9) : USP6</i>	NM_001127192.1	exon 1	NM_001304284.1	exon 10
<i>OMD : USP6</i>	NM_005014.2	exon 1	NM_001304284.1	exon 9
<i>COL1A1 : USP6</i>	NM_000088.3	exon 1	NM_001304284.1	exon 10
<i>EWSR1 : CREB1</i>	NM_005243.3	exon 7	NM_004379.4	exon 6
<i>EWSR1 : ATF1</i>	NM_005243.3	exon 7	NM_005171.4	exon 5
<i>EWSR1 : ATF1</i>	NM_005243.3	exon 8	NM_005171.4	exon 4

Targeted Genes Fusions and Methodology
Details for MayoComplete Sarcoma Panel (continued)

Gene Rearrangement	5' Gene Partner Exons		3' Gene Partner Exons	
	5' Gene : 3' Gene	Reference Transcript	Exon/Intron	Reference Transcript
<i>FUS : ATF1</i>	NM_004960.3	exon 5*	NM_005171.4	exon 5
<i>ASPSCR1 : TFE3</i>	NM_024083.3	exon 7	NM_006521.5	exon 5
<i>ASPSCR1 : TFE3</i>	NM_024083.3	exon 7*	NM_006521.5	exon 5
<i>ASPSCR1 : TFE3</i>	NM_024083.3	exon 7*	NM_006521.5	exon 6
<i>EWSR1 : ATF1</i>	NM_005243.3	exon 7	NM_005171.4	exon 5
<i>EWSR1 : ATF1</i>	NM_005243.3	exon 7	NM_005171.4	exon 6
<i>EWSR1 : ATF1</i>	NM_005243.3	exon 7	NM_005171.4	exon 7
<i>EWSR1 : ATF1</i>	NM_005243.3	exon 8	NM_005171.4	exon 4
<i>EWSR1 : ATF1</i>	NM_005243.3	exon 10	NM_005171.4	exon 5
<i>EWSR1 : ATF1</i>	NM_005243.3	exon 11	NM_005171.4	exon 3
<i>EWSR1 : CREB1</i>	NM_005243.3	exon 7	NM_004379.4	exon 6
<i>ETV6 : NTRK3</i>	NM_001987.4	exon 5	NM_001012338.2	exon 15
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 15	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 18	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 19	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 25	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 26	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 31	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 32	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 33	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 38	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 39	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 45	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 46	NM_002608.3	exon 2
<i>COL1A1 : PDGFB</i>	NM_000088.3	exon 47	NM_002608.3	exon 2
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 2	NM_015215.3	exon 8
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 2	NM_015215.3	exon 9
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 3	NM_015215.3	exon 8
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 3	NM_015215.3	exon 9
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 3	NM_015215.3	exon 9*
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 3	NM_015215.3	exon 9*
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 3	NM_015215.3	exon 9*
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 3	NM_015215.3	exon 9*
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 3	NM_015215.3	exon 9*
<i>WWTR1 : CAMTA1</i>	NM_015472.5	exon 3	NM_015215.3	exon 9*
<i>YAP1 : TFE3</i>	NM_001130145.2	exon 1	NM_006521.5	exon 4
<i>YAP1 : TFE3</i>	NM_001130145.2	exon 1	NM_006521.5	exon 6
<i>CIC : DUX4</i>	NM_001304815.1	exon 20*	NM_033178.2	exon 1*
<i>CIC : DUX4</i>	NM_001304815.1	exon 21*	NM_033178.2	exon 1*
<i>CIC : DUX4</i>	NM_001304815.1	exon 21*	NM_033178.2	exon 1*

Targeted Genes Fusions and Methodology
Details for MayoComplete Sarcoma Panel (continued)

Gene Rearrangement	5' Gene Partner Exons		3' Gene Partner Exons	
	5' Gene : 3' Gene	Reference Transcript	Exon/Intron	Reference Transcript
<i>CIC : DUX4</i>	NM_001304815.1	exon 21*	NM_033178.2	exon 1*
<i>CIC : DUX4</i>	NM_001304815.1	exon 21*	NM_033178.2	insertion-exon 1*
<i>CIC : FOXO4</i>	NM_001304815.1	exon 20*	NM_005938.3	exon 2*
<i>CITED2 : PRDM10</i>	NM_006079.4	exon 2*	NM_020228.2	exon 14
<i>BCOR : CCNB3</i>	NM_017745.5	exon 15*	NM_033031.2	exon 5
<i>BCOR : CCNB3</i>	NM_017745.5	exon 15*	NM_033031.2	intron 4*
<i>BCOR : MAML3</i>	NM_017745.5	exon 15*	NM_018717.4 (ENST00000509479.3)	exon 2
<i>EWSR1 : SMARCA5</i>	NM_005243.3	exon 7	NM_003601.3	exon 5
<i>EWSR1 : POU5F1</i>	NM_005243.3	exon 7*	NM_002701.5	exon 2
<i>EWSR1 : POU5F1</i>	NM_005243.3	exon 6	NM_002701.5	insertion-exon 1*
<i>EWSR1 : NFATC2</i>	NM_005243.3	exon 8	NM_012340.4	exon 3
<i>EWSR1 : SP3</i>	NM_005243.3	exon 7	NM_003111.4	exon 6*
<i>EWSR1 : SP3</i>	NM_005243.3	exon 8	NM_003111.4	exon 6*
<i>EWSR1 : PATZ1 (ZSG)</i>	NM_005243.3	exon 8	NM_014323.2	exon 1*
<i>EWSR1 : PATZ1 (ZSG)</i>	NM_005243.3	exon 9	NM_014323.2	exon 1*
<i>ZC3H7B : BCOR</i>	NM_017590.5	exon 10	NM_017745.5	exon 7
<i>MED12 : PRDM10</i>	NM_005120.2	exon 43	NM_020228.2	exon 13
<i>MED12 : PRDM10</i>	NM_005120.2	exon 43	NM_020228.2	exon 14
<i>EWSR1 : NR4A3</i>	NM_005243.3	exon 7	NM_006981.3	exon 2
<i>EWSR1 : NR4A3</i>	NM_005243.3	exon 10	NM_006981.3	insertion-exon 3
<i>EWSR1 : NR4A3</i>	NM_005243.3	exon 12	NM_006981.3	exon 3
<i>EWSR1 : NR4A3</i>	NM_005243.3	exon 12*	NM_006981.3	exon 3
<i>EWSR1 : NR4A3</i>	NM_005243.3	exon 13	NM_006981.3	exon 2
<i>TAF15 : NR4A3</i>	NM_139215.2	exon 6	NM_006981.3	exon 3
<i>TCF12 : NR4A3</i>	NM_207036.1	exon 5	NM_006981.3	exon 3
<i>FUS : CREB3L2</i>	NM_004960.3	exon 5*	NM_194071.3	insertion-exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 5*	NM_194071.3	exon 6
<i>FUS : CREB3L2</i>	NM_004960.3	exon 6	NM_194071.3	exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 6	NM_194071.3	insertion-exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 6	NM_194071.3	exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 6*	NM_194071.3	exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 6*	NM_194071.3	exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 6*	NM_194071.3	exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 6*	NM_194071.3	exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 7	NM_194071.3	exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 7*	NM_194071.3	exon 5*
<i>FUS : CREB3L2</i>	NM_004960.3	exon 7*	NM_194071.3	exon 5*
<i>FUS : CREB3L1</i>	NM_004960.3	exon 6*	NM_052854.3	exon 5*
<i>FUS : CREB3L1</i>	NM_004960.3	exon 9*	NM_052854.3	exon 5*

Targeted Genes Fusions and Methodology
Details for MayoComplete Sarcoma Panel (continued)

Gene Rearrangement	5' Gene Partner Exons		3' Gene Partner Exons	
	5' Gene : 3' Gene	Reference Transcript	Exon/Intron	Reference Transcript
<i>EWSR1 : CREB3L1</i>	NM_005243.3	exon 8*	NM_052854.3	exon 5*
<i>EWSR1 : CREB3L1</i>	NM_005243.3	exon 8*	NM_052854.3	exon 5*
<i>PAX3 : FOXO1</i>	NM_181457.3	exon 7	NM_018717 (ENST00000509479.3)	exon 2
<i>PAX3 : FOXO1</i>	NM_181457.3	exon 7	NM_002015.3	exon 2
<i>PAX3 : NCOA1</i>	NM_181457.3	exon 6	NM_003743.4	exon 13
<i>PAX3 : NCOA1</i>	NM_181457.3	exon 7	NM_003743.4	exon 12
<i>PAX3 : NCOA1</i>	NM_181457.3	exon 7	NM_003743.4	exon 14
<i>PAX3 : NCOA2</i>	NM_181457.3	exon 7	NM_006540.3	exon 12
<i>COL6A3 : CSF1</i>	NM_004369.3	exon 8*	NM_000757.5	exon 6*
<i>COL6A3 : CSF1</i>	NM_004369.3	exon 9*	NM_000757.5	exon 6*
<i>COL6A3 : CSF1</i>	NM_004369.3	exon 9*	NM_000757.5	exon 6*
<i>COL6A3 : CSF1</i>	NM_004369.3	exon 9*	NM_000757.5	exon 6
<i>COL6A3 : CSF1</i>	NM_004369.3	exon 11*	NM_000757.5	exon 6*
<i>ZFP36 : FOSB</i>	NM_003407.3	exon 1	NM_006732.2	exon 2
<i>FOSB : ZFP36</i>	NM_006732.2	exon 1	NM_003407.3	exon 2
<i>WWTR1 : FOSB</i>	NM_015472.5	exon 2	NM_006732.2	exon 1*
<i>SERPINE1 : FOSB</i>	NM_000602.4	exon 1	NM_006732.2	insertion-exon 2*
<i>SERPINE1 : FOSB</i>	NM_000602.4	exon 1	NM_006732.2	insertion-exon 1*
<i>SFPQ : FOSB</i>	NM_005066.2	exon 9	NM_006732.2	exon 2
<i>FUS : DDIT3</i>	NM_004960.3	exon 3	NM_001195053.1	exon 2
<i>FUS : DDIT3</i>	NM_004960.3	exon 5*	NM_001195053.1	exon 2
<i>FUS : DDIT3</i>	NM_004960.3	exon 5*	NM_001195053.1	insertion-exon 2
<i>FUS : DDIT3</i>	NM_004960.3	exon 5*	NM_001195053.1	exon 3
<i>FUS : DDIT3</i>	NM_004960.3	exon 6*	NM_001195053.1	exon 2
<i>FUS : DDIT3</i>	NM_004960.3	exon 6	NM_001195053.1	exon 2
<i>FUS : DDIT3</i>	NM_004960.3	exon 7	NM_001195053.1	exon 2
<i>FUS : DDIT3</i>	NM_004960.3	exon 8	NM_001195053.1	exon 2
<i>FUS : DDIT3</i>	NM_004960.3	exon 9	NM_001195053.1	exon 3
<i>FUS : DDIT3</i>	NM_004960.3	exon 13	NM_001195053.1	exon 2
<i>EWSR1 : DDIT3</i>	NM_005243.3	exon 7	NM_001195053.1	exon 2
<i>EWSR1 : DDIT3</i>	NM_005243.3	exon 10	NM_001195053.1	exon 2
<i>EWSR1 : DDIT3</i>	NM_005243.3	exon 13	NM_001195053.1	exon 2
<i>EWSR1 : DDIT3</i>	NM_005243.3	exon 13	NM_001195053.1	exon 3*
<i>EP400 : PHF1</i>	NM_015409.4	exon 37*	NM_002636.4	exon 2
<i>EP400 : PHF1</i>	NM_015409.4	exon 38*	NM_002636.4	insertion-exon 2
<i>MEAF6 : PHF1</i>	NM_022756.5	exon 5	NM_002636.4	exon 2
<i>EPC1 : PHF1</i>	NM_025209.3	exon 10	NM_002636.4	exon 2
<i>ZC3H7B : BCOR</i>	NM_017590.5	exon 10	NM_017745.5	exon 7

Targeted Genes Fusions and Methodology
Details for MayoComplete Sarcoma Panel (continued)

Gene Rearrangement	5' Gene Partner Exons		3' Gene Partner Exons	
	5' Gene : 3' Gene	Reference Transcript	Exon/Intron	Reference Transcript
<i>JAZF1 : SUZ12</i>	NM_175061.3	exon 3	NM_015355.3	exon 2
<i>JAZF1 : PHF1</i>	NM_175061.3	exon 2	NM_002636.4	insertion-exon 1*
<i>JAZF1 : PHF1</i>	NM_175061.3	exon 3	NM_002636.4	insertion-exon 2
<i>EPC1 : PHF1</i>	NM_025209.3	exon 10	NM_002636.4	exon 2
<i>MEAF6 : PHF1</i>	NM_022756.5	exon 5	NM_002636.4	exon 2
<i>YWHAE : NUTM2B</i>	NM_006761.4	exon 6	NM_001278495	exon 2
<i>MBTD : CXorf67</i>	NM_017643.2	exon 16	NM_203407.2	exon 1*
<i>ZC3H7B : BCOR</i>	NM_017590.5	exon 10	NM_017745.5	exon 7
<i>BCOR : ZC3H7B</i>	NM_017745.5	exon 6	NM_017590.5	exon 11
<i>BCOR : ZC3H7B</i>	NM_017745.5	exon 6	NM_017590.5	exon 13
<i>EML4 : ALK</i>	NM_019063.4	exon 2	NM_004304.4	exon 20
<i>TPM3 : ALK</i>	NM_153649.3	exon 7	NM_004304.4	exon 20
<i>TPM4 : ALK</i>	NM_001145160.1	exon 7	NM_004304.4	exon 20
<i>TPM4 : ALK</i>	NM_001145160.1	exon 8	NM_004304.4	exon 20
<i>CLTC : ALK</i>	NM_004859.3	exon 31	NM_004304.4	exon 20
<i>RANBP2 : ALK</i>	NM_006267.4	exon 18	NM_004304.4	exon 20
<i>CARS : ALK</i>	NM_139273.3	exon 17	NM_004304.4	exon 20
<i>ATIC : ALK</i>	NM_004044.6	exon 7	NM_004304.4	exon 20
<i>SEC31A : ALK</i>	NM_016211.3	exon 19	NM_004304.4	exon 20
<i>SEC31A : ALK</i>	NM_016211.3	exon 20	NM_004304.4	exon 20
<i>FN1 : ALK</i>	NM_212482.2	exon 20	NM_004304.4	exon 19
<i>FN1 : ALK</i>	NM_212482.2	exon 23	NM_004304.4	exon 19
<i>PPFIBP1 : ALK</i>	NM_003622.3	exon 8	NM_004304.4	exon 20
<i>PPFIBP1 : ALK</i>	NM_003622.3	exon 12	NM_004304.4	exon 20
<i>RNF213 (ALO17) : ALK</i>	NM_001256071.2	exon 20	NM_004304.4	exon 20
<i>TRAF3 : ALK</i>	NM_145725.2	exon 11	NM_004304.4	exon 20
<i>IGFBP5 : ALK</i>	NM_000599.3	exon 1	NM_004304.4	exon 19
<i>TFG : ALK</i>	NM_006070.5	exon 4	NM_004304.4	exon 20
<i>TFG : ALK</i>	NM_006070.5	exon 5	NM_004304.4	exon 20
<i>TFG : ALK</i>	NM_006070.5	exon 6	NM_004304.4	exon 20
<i>FN1 : FGFR1</i>	NM_212482.2	exon 22	NM_023110.2	exon 3
<i>FN1 : FGFR1</i>	NM_212482.2	exon 22	NM_023110.2	exon 3
<i>FN1 : FGFR1</i>	NM_212482.2	exon 23	NM_023110.2	exon 3
<i>FN1 : FGFR1</i>	NM_212482.2	exon 23	NM_023110.2	exon 3
<i>FN1 : FGFR1</i>	NM_212482.2	exon 27	NM_023110.2	exon 3
<i>FN1 : FGFR1</i>	NM_212482.2	exon 28	NM_023110.2	exon 3
<i>SRF : NCOA2</i>	NM_003131.3	exon 6	NM_006540.3	exon 12
<i>TEAD1 : NCOA2</i>	NM_021961.5	exon 8	NM_006540.3	exon 13

Targeted Genes Fusions and Methodology
Details for MayoComplete Sarcoma Panel (continued)

Gene Rearrangement	5' Gene Partner Exons		3' Gene Partner Exons	
	5' Gene : 3' Gene	Reference Transcript	Exon/Intron	Reference Transcript
<i>VGLL2 : NCOA2</i>	NM_182645.3	exon 2	NM_006540.3	exon 14
<i>VGLL2 : CITED2</i>	NM_182645.3	intron 3*	NM_006079.4	exon 2*
<i>AHRR : NCOA2</i>	NM_020731.4	exon 9	NM_006540.3	exon 11
<i>AHRR : NCOA2</i>	NM_020731.4	exon 9	NM_006540.3	exon 16
<i>AHRR : NCOA2</i>	NM_020731.4	exon 10	NM_006540.3	exon 13
<i>AHRR : NCOA2</i>	NM_020731.4	exon 10	NM_006540.3	exon 14
<i>NCOA2 : AHRR</i>	NM_006540.3	exon 13	NM_020731.4	exon 11
<i>NCOA2 : AHRR</i>	NM_006540.3	exon 15	NM_020731.4	exon 10
<i>EWSR1 : POU5F1</i>	NM_005243.3	exon 6	NM_002701.5	exon 1*
<i>EWSR1 : POU5F1</i>	NM_005243.3	exon 6*	NM_002701.5	exon 2
<i>EWSR1 : POU5F1</i>	NM_005243.3	exon 7*	NM_002701.5	exon 2
<i>EWSR1 : PBX1</i>	NM_005243.3	exon 7	NM_002585.3	exon 5
<i>EWSR1 : PBX1</i>	NM_005243.3	exon 8	NM_002585.3	exon 5
<i>EWSR1 : PBX3</i>	NM_005243.3	exon 8	NM_006195.5	exon 5
<i>EWSR1 : ZNF444</i>	NM_005243.3	exon 8	NM_018337.3	exon 5*
<i>FUS : POU5F1</i>	NM_004960.3	exon 5*	NM_002701.5	exon 2
<i>FUS : KLF17</i>	NM_004960.3	exon 4	NM_173484.3	exon 1*
<i>FUS : KLF17</i>	NM_004960.3	exon 6*	NM_173484.3	exon 1*
<i>PDPN : PRKCB</i>	NM_006474.4	exon 5	NM_002738.6	exon 8
<i>CSF1 : S100A10</i>	NM_000757.5	exon 8	NM_002966.2	exon 3
<i>KIRREL : PRKCA</i>	NM_018240.6	exon 13	NM_002737.2	exon 9
<i>LAMTOR1 : PRKCD</i>	NM_017907.2	exon 1	NM_006254.3	exon 11
<i>NUMA1 : SFMBT1</i>	NM_006185.3	exon 2	NM_016329.3	exon 5
<i>CD63 (RDH5) : PRKCD</i>	NM_001780.5	exon 8	NM_006254.3	exon 9
<i>SQSTM1 : ALK</i>	NM_003900.4	exon 5	NM_004304.4	exon 20
<i>VCL : ALK</i>	NM_014000.2	exon 16	NM_004304.4	exon 20
<i>ACTB : GLI1</i>	NM_001101.3	exon 1	NM_005269.2	insertion-exon 6
<i>ACTB : GLI1</i>	NM_001101.3	exon 2	NM_005269.2	exon 6
<i>ACTB : GLI1</i>	NM_001101.3	exon 2	NM_005269.2	exon 7*
<i>ACTB : GLI1</i>	NM_001101.3	exon 3	NM_005269.2	exon 6
<i>ACTB : GLI1</i>	NM_001101.3	exon 3	NM_005269.2	exon 7
<i>ACTB : GLI1</i>	NM_001101.3	exon 3	NM_005269.2	insertion-exon 6
<i>ACTB : GLI1</i>	NM_001101.3	exon 3	NM_005269.2	insertion-exon 5*
<i>GLI1 : ACTB</i>	NM_005269.2	exon 6	NM_001101.3	exon 4
<i>GLI1 : ACTB</i>	NM_005269.2	exon 6	NM_001101.3	exon 4
<i>COL1A2 : PLAG1</i>	NM_000089.3	exon 1	NM_002655.2	exon 3
<i>COL1A2 : PLAG1</i>	NM_000089.3	exon 1	NM_002655.2	exon 2

Targeted Genes Fusions and Methodology
Details for MayoComplete Sarcoma Panel (continued)

Gene Rearrangement	5' Gene Partner Exons		3' Gene Partner Exons	
	5' Gene : 3' Gene	Reference Transcript	Exon/Intron	Reference Transcript
<i>COL3A1 : PLAG1</i>	NM_000090.3	exon 1	NM_002655.2	exon 3
<i>COL3A1 : PLAG1</i>	NM_000090.3	exon 1	NM_002655.2	exon 2
<i>RAB2A : PLAG1</i>	NM_002865.2	exon 1	NM_002655.2	exon 3
<i>HAS2 : PLAG1</i>	NM_005328.2	exon 1	NM_002655.2	exon 3
<i>HMGA2 : LPP</i>	NM_003483.4	exon 3	NM_005578.4	exon 9
<i>LPP : HMGA2</i>	NM_005578.4	exon 7	NM_003483.4	exon 4
<i>LPP : HMGA2</i>	NM_005578.4	exon 8	NM_003483.4	exon 4
<i>HMGA2 : NFIB</i>	NM_003483.4	exon 4	NM_001190737.1	exon 11
<i>HMGA2 : PLPP3</i>	NM_003483.4	exon 5*	NM_003713.4	exon 6
<i>HMGA2 : SETBP1</i>	NM_003483.4	exon 3	NM_015559.2	exon 6*
<i>HMGA2 : SETBP1</i>	NM_003483.4	exon 3	NM_015559.2	exon 6*
<i>C11orf95 (ZFTA) : MKL2</i>	NM_001144936.1	exon 4*	NM_001308142.1	exon 12
<i>C11orf95 (ZFTA) : MKL2</i>	NM_001144936.1	exon 5*	NM_001308142.1	exon 12
<i>TPR : NTRK1</i>	NM_003292.2	exon 10	NM_001012331.1	exon 9
<i>TPM3 : NTRK1</i>	NM_153649.3	exon 7	NM_001012331.1	exon 9
<i>BRD3 : NUTM1</i>	NM_007371.3	exon 10	NM_001284292.1	exon 3
<i>BRD4 : NUTM1</i>	NM_058243.2	exon 11	NM_001284292.1	exon 3
<i>BRD4 : NUTM1</i>	NM_058243.2	exon 14	NM_001284292.1	exon 3*
<i>EWSR1 : CREB3L1</i>	NM_005243.3	exon 7	NM_052854.3	insertion-exon 6*
<i>EWSR1 : CREB3L1</i>	NM_005243.3	exon 11	NM_052854.3	exon 6
<i>EWSR1 : CREB3L1</i>	NM_005243.3	exon 8*	NM_052854.3	exon 6*
<i>EWSR1 : CREB3L2</i>	NM_005243.3	exon 7	NM_194071.3	exon 6*
<i>MIR143HG (CARMN) : NOTCH2</i>	NR_027180 (NR_105059.1)	exon 1	NM_024408.3	exon 27
<i>MIR143HG (CARMN) : NOTCH1</i>	NR_027180 (NR_105059.1)	exon 1	NM_017617.4	exon 27
<i>NOTCH2 : CEP128</i>	NM_024408.3	exon 26	NM_152446.3	exon 7*
<i>RAD51B : OPHN1</i>	NM_002877.5	exon 3	NM_002547.2	exon 17
<i>RAD51B : RRAGB</i>	NM_002877.5	exon 8	NM_016656.3	insertion-exon 2
<i>DVL2 : TFE3</i>	NM_004422.2	exon 4	NM_006521.5	exon 7
<i>CLTC : TFE3</i>	NM_004859.3	exon 17	NM_006521.5	exon 6
<i>HMGA2 : LPP</i>	NM_003483.4	exon 3	NM_005578.4	exon 9

*Out of frame