



Gene Rearrangement (5'Gene – 3'Gene)	5' Gene Partner Exons (*: out of frame)		3' Gene Partner Exons (*: out of frame)	
	Transcript Number	Exon/Intron	Transcript Number	Exon/Intron
<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
<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

Sarcoma Gene Panel Template (continued)

Gene Rearrangement	5' Gene Partner Exons (*: out of frame)		3' Gene Partner Exons (*: out of frame)	
(5'Gene – 3'Gene)	Transcript Number	Exon/Intron	Transcript Number	Exon/Intron
<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_006540.2	exon 13
<i>HEY1-NCOA2</i>	NM_012258.3	exon 4	NM_006540.2	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
<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

Sarcoma Gene Panel Template (continued)

Gene Rearrangement	5' Gene Partner Exons (*: out of frame)		3' Gene Partner Exons (*: out of frame)	
(5'Gene – 3'Gene)	Transcript Number	Exon/Intron	Transcript Number	Exon/Intron
<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_015472.4	exon 2	NM_015215.3	exon 8
<i>WWTR1-CAMTA1</i>	NM_015472.4	exon 2	NM_015215.3	exon 9
<i>WWTR1-CAMTA1</i>	NM_015472.4	exon 3	NM_015215.3	exon 8
<i>WWTR1-CAMTA1</i>	NM_015472.4	exon 3	NM_015215.3	exon 9
<i>WWTR1-CAMTA1</i>	NM_015472.4	exon 3	NM_015215.3	exon 9*
<i>WWTR1-CAMTA1</i>	NM_015472.4	exon 3	NM_015215.3	exon 9*
<i>WWTR1-CAMTA1</i>	NM_015472.4	exon 3	NM_015215.3	exon 9*
<i>WWTR1-CAMTA1</i>	NM_015472.4	exon 3	NM_015215.3	exon 9*
<i>WWTR1-CAMTA1</i>	NM_015472.4	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*
<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

Sarcoma Gene Panel Template (continued)

Gene Rearrangement	5' Gene Partner Exons (*: out of frame)		3' Gene Partner Exons (*: out of frame)	
(5'Gene – 3'Gene)	Transcript Number	Exon/Intron	Transcript Number	Exon/Intron
<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*
<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*

Sarcoma Gene Panel Template (continued)

Gene Rearrangement	5' Gene Partner Exons (*: out of frame)		3' Gene Partner Exons (*: out of frame)	
(5'Gene – 3'Gene)	Transcript Number	Exon/Intron	Transcript Number	Exon/Intron
<i>PAX3-MAML3</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
<i>JAZF1-SUZ12</i>	NM_175061.3	exon 3	NM_015355.3	exon 2

Sarcoma Gene Panel Template (continued)

Gene Rearrangement	5' Gene Partner Exons (*: out of frame)		3' Gene Partner Exons (*: out of frame)	
(5'Gene – 3'Gene)	Transcript Number	Exon/Intron	Transcript Number	Exon/Intron
<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_212482.1	exon 20	NM_004304.4	exon 19
<i>FN1-ALK</i>	NM_212482.1	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 (11-20)</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

Sarcoma Gene Panel Template (continued)

Gene Rearrangement	5' Gene Partner Exons (*: out of frame)		3' Gene Partner Exons (*: out of frame)	
(5'Gene – 3'Gene)	Transcript Number	Exon/Intron	Transcript Number	Exon/Intron
<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

Sarcoma Gene Panel Template (continued)

Gene Rearrangement	5' Gene Partner Exons (*: out of frame)		3' Gene Partner Exons (*: out of frame)	
(5'Gene – 3'Gene)	Transcript Number	Exon/Intron	Transcript Number	Exon/Intron
<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-MKL2</i>	NM_001144936.1	exon 4*	NM_001308142.1	exon 12
<i>C11orf95-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	exonc 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

The assay was designed to detect common gene rearrangements (fusions and transcript variants) and novel gene fusion partners involving 138 targeted genes, as indicated in the table above.

Reference transcript numbers may have been updated due to database re-versioning. Refer to the patient report for the reference gene transcript used for analysis of that specific case.

To verify if a specific gene fusion/rearrangement is covered by this assay, contact a laboratory genetic counselor at 800-533-1710.