



Targeted Genes and Methodology Details for MayoComplete Fibromyomatous Renal Cell Carcinoma

The following applies to MCFRC / MayoComplete Renal Cell Carcinoma with Fibromyomatous Stroma Panel, Next-Generation Sequencing. Next-generation sequencing (NGS) 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 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 Stop	Reference Transcript
<i>ELOC</i>	Ex2	chr8	74871998	74872005	NM_005648
<i>ELOC</i>	Ex3	chr8	74868144	74868291	NM_005648
<i>ELOC</i>	Ex4	chr8	74858863	74859057	NM_005648
<i>TSC1</i>	Ex3	chr9	135804152	135804261	NM_000368
<i>TSC1</i>	Ex4	chr9	135802586	135802693	NM_000368
<i>TSC1</i>	Ex5	chr9	135800972	135801128	NM_000368
<i>TSC1</i>	Ex6	chr9	135798733	135798881	NM_000368
<i>TSC1</i>	Ex7	chr9	135797204	135797362	NM_000368
<i>TSC1</i>	Ex8	chr9	135796748	135796825	NM_000368
<i>TSC1</i>	Ex9	chr9	135787667	135787846	NM_000368
<i>TSC1</i>	Ex10	chr9	135786838	135786957	NM_000368
<i>TSC1</i>	Ex11	chr9	135786387	135786502	NM_000368
<i>TSC1</i>	Ex12	chr9	135785956	135786081	NM_000368
<i>TSC1</i>	Ex13	chr9	135782686	135782759	NM_000368
<i>TSC1</i>	Ex14	chr9	135782116	135782224	NM_000368
<i>TSC1</i>	Ex15	chr9	135780966	135781528	NM_000368
<i>TSC1</i>	Ex16	chr9	135779796	135779843	NM_000368
<i>TSC1</i>	Ex17	chr9	135779036	135779206	NM_000368
<i>TSC1</i>	Ex18	chr9	135777990	135778176	NM_000368
<i>TSC1</i>	Ex19	chr9	135776974	135777088	NM_000368
<i>TSC1</i>	Ex20	chr9	135776100	135776226	NM_000368
<i>TSC1</i>	Ex21	chr9	135772808	135772999	NM_000368
<i>TSC1</i>	Ex22	chr9	135772569	135772734	NM_000368
<i>TSC1</i>	Ex23	chr9	135772011	135772143	NM_000368
<i>TSC1</i>	Ex23	chr9	135771620	135771984	NM_000368
<i>TSC2</i>	Ex2	chr16	2098615	2098756	NM_000548
<i>TSC2</i>	Ex3	chr16	2100399	2100489	NM_000548
<i>TSC2</i>	Ex4	chr16	2103341	2103455	NM_000548
<i>TSC2</i>	Ex5	chr16	2104295	2104443	NM_000548
<i>TSC2</i>	Ex6	chr16	2105401	2105522	NM_000548
<i>TSC2</i>	Ex7	chr16	2106195	2106247	NM_000548

**Targeted Genes and Methodology Details for
MayoComplete Fibromyomatous Renal Cell
Carcinoma** (continued)

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
<i>TSC2</i>	Ex8	chr16	2106643	2106772	NM_000548
<i>TSC2</i>	Ex9	chr16	2107104	2107181	NM_000548
<i>TSC2</i>	Ex10	chr16	2108746	2108876	NM_000548
<i>TSC2</i>	Ex11	chr16	2110669	2110816	NM_000548
<i>TSC2</i>	Ex12	chr16	2111870	2112011	NM_000548
<i>TSC2</i>	Ex13	chr16	2112496	2112603	NM_000548
<i>TSC2</i>	Ex14	chr16	2112971	2113056	NM_000548
<i>TSC2</i>	Ex15	chr16	2114271	2114430	NM_000548
<i>TSC2</i>	Ex16	chr16	2115518	2115638	NM_000548
<i>TSC2</i>	Ex17	chr16	2120455	2120581	NM_000548
<i>TSC2</i>	Ex18	chr16	2121509	2121619	NM_000548
<i>TSC2</i>	Ex19	chr16	2121783	2121937	NM_000548
<i>TSC2</i>	Ex20	chr16	2122240	2122366	NM_000548
<i>TSC2</i>	Ex21	chr16	2122848	2122986	NM_000548
<i>TSC2</i>	Ex22	chr16	2124199	2124392	NM_000548
<i>TSC2</i>	Ex23	chr16	2125798	2125895	NM_000548
<i>TSC2</i>	Ex24	chr16	2126067	2126173	NM_000548
<i>TSC2</i>	Ex25	chr16	2126490	2126588	NM_000548
<i>TSC2</i>	Ex26	chr16	2127597	2127729	NM_000548
<i>TSC2</i>	Ex27	chr16	2129031	2129199	NM_000548
<i>TSC2</i>	Ex28	chr16	2129275	2129431	NM_000548
<i>TSC2</i>	Ex29	chr16	2129556	2129672	NM_000548
<i>TSC2</i>	Ex30	chr16	2130164	2130380	NM_000548
<i>TSC2</i>	Ex31	chr16	2131594	2131801	NM_000548
<i>TSC2</i>	Ex32	chr16	2132435	2132507	NM_000548
<i>TSC2</i>	Ex33	chr16	2133694	2133819	NM_000548
<i>TSC2</i>	Ex34	chr16	2134227	2134718	NM_000548
<i>TSC2</i>	Ex35	chr16	2134950	2135029	NM_000548
<i>TSC2</i>	Ex36	chr16	2135229	2135325	NM_000548
<i>TSC2</i>	Ex37	chr16	2136192	2136382	NM_000548
<i>TSC2</i>	Ex38	chr16	2136731	2136874	NM_000548
<i>TSC2</i>	Ex39	chr16	2137862	2137944	NM_000548
<i>TSC2</i>	Ex40	chr16	2138047	2138142	NM_000548
<i>TSC2</i>	Ex41	chr16	2138226	2138328	NM_000548
<i>TSC2</i>	Ex42	chr16	2138445	2138613	NM_000548
<i>VHL</i>	Ex1	chr3	10183530	10183873	NM_000551
<i>VHL</i>	Ex2	chr3	10188196	10188322	NM_000551
<i>VHL</i>	Ex3	chr3	10191469	10191651	NM_000551