

Supplementary Information

Genomic and immunohistochemical analysis in human adrenal cortical neoplasia reveal beta-catenin mutations as potential prognostic biomarker

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SUMMARY OF SUPPLEMENTARY INFORMATION:

- ▶ **Supplementary Table 1.** SNaPshot tumor genotyping assay
- ▶ **Supplementary Table 2.** Primers sequences
- ▶ **Supplementary Table 3.** Sequences of extension primers

Supplementary Table 1. SNaPshot tumor genotyping assay

Gene	Amino acid - cDNA residue	Gene	Amino acid - cDNA residue
<i>AKT1</i>	E17 - 49G ^{v2}	<i>MAP2K1</i>	Q56 - 167A ^{v3}
<i>APC</i>	R1114 - 3340C	<i>MAP2K1</i>	K57 - 171G ^{v3}
<i>APC</i>	Q1338 - 4012C	<i>MAP2K1</i>	D67 - 199G ^{v3}
<i>APC</i>	R1450 - 4348C	<i>NOTCH1</i>	L1575 - 4724T
<i>APC</i>	T1556fs - 4666_4667insA	<i>NOTCH1</i>	L1601 - 4802T
<i>BRAF</i>	G466 - 1397G ^{v3}	<i>NRAS</i>	G12 - 34G
<i>BRAF</i>	G469 - 1406G ^{v3}	<i>NRAS</i>	G12 - 35G
<i>BRAF</i>	L597 - 1789C ^{v3}	<i>NRAS</i>	G13 - 37G
<i>BRAF</i>	V600 - 1798G	<i>NRAS</i>	G13 - 38G
<i>BRAF</i>	V600 - 1799T	<i>NRAS</i>	Q61 - 181C
<i>BRAF</i>	V600 - 1799T	<i>NRAS</i>	Q61 - 182A
<i>CTNNB1</i>	D32 - 94G	<i>NRAS</i>	Q61 - 183A
<i>CTNNB1</i>	D32 - 95A	<i>PIK3CA</i>	R88 - 263G
<i>CTNNB1</i>	S33 - 98C	<i>PIK3CA</i>	E542 - 1624G
<i>CTNNB1</i>	G34 - 101G	<i>PIK3CA</i>	E545 - 1633G
<i>CTNNB1</i>	S37 - 109T	<i>PIK3CA</i>	Q546 - 1636C
<i>CTNNB1</i>	S37 - 110C	<i>PIK3CA</i>	Q546 - 1637A
<i>CTNNB1</i>	T41 - 121A	<i>PIK3CA</i>	H1047 - 3139C
<i>CTNNB1</i>	T41 - 122C	<i>PIK3CA</i>	H1047 - 3140A
<i>CTNNB1</i>	S45 - 133T	<i>PIK3CA</i>	G1049 - 3145G
<i>CTNNB1</i>	S45 - 134C	<i>PTEN</i>	R130 - 388C
<i>EGFR</i>	G719 - 2155G	<i>PTEN</i>	R173 - 517C
<i>EGFR</i>	G719 - 2156G ^{v3}	<i>PTEN</i>	R233 - 697C
<i>EGFR</i>	T790 - 2369C	<i>PTEN</i>	K267fs - 800delA
<i>EGFR</i>	L858 - 2573T	<i>TP53</i>	R175 - 524G
<i>EGFR</i>	L861 - 2582T ^{v3}	<i>TP53</i>	G245 - 733G
<i>EGFR</i>	E746_A750 - 2235_2249del	<i>TP53</i>	R248 - 742C
<i>EGFR</i>	E746_A750 - 2236_2250del	<i>TP53</i>	R248 - 743G
<i>IDH1</i>	R132 - 394C ^{v2}	<i>TP53</i>	R273 - 817C
<i>IDH1</i>	R132 - 395G ^{v2}	<i>TP53</i>	R273 - 818G
<i>KIT</i>	D816 - 2447A	<i>TP53</i>	R306 - 916C
<i>KRAS</i>	G12 - 34G	<i>TP53</i>	R306 - 916C
<i>KRAS</i>	G12 - 35G	Sizing assays (insertion/deletions):	
<i>KRAS</i>	G13 - 37G	<i>EGFR</i>	exon 19
<i>KRAS</i>	G13 - 38G	<i>EGFR</i>	exon 20 ^{v2}
<i>KRAS</i>	Q61 - 181C ^{v3}	<i>ERBB2 (Her2)</i>	Exon 20 ^{v2}
<i>KRAS</i>	Q61 - 182A ^{v3}		
<i>KRAS</i>	Q61 - 183A ^{v3}		

^{v2} Assays added to the previously published SNaPshot panel (Dias-Santagata, 2010) to obtain "version 2"^{v3} Assays added to the "SNaPshot version 2" panel to obtain "version 3"

Supplementary Table 2. Primers sequences

Amplification Primer	Sequence
AKT1_exon 3_forward	ACGTTGGATGGGTAGAGTGTGCGTGGCTCT
AKT1_exon 3_reverse	ACGTTGGATGAGGTGCCATCATTCTTGAGG
BRAF_exon 11_forward	ACGTTGGATGTCTGTTTGGCTTGACTTGACTT
BRAF_exon 11_reverse	ACGTTGGATGTCACCACATTACATACTTACCATGC
IDH1_exon 4_forward	ACGTTGGATGGGCTTGTGAGTGGATGGGTA
IDH1_exon 4_reverse	ACGTTGGATGGCAAATCACATTATTGCCAAC
KRAS_exon 3_forward	ACGTTGGATGGTTTCTCCCTTCTCAGGATTC
KRAS_exon 3_reverse	ACGTTGGATGCCCCACCTATAATGGTGAATATCTTC
MAP2K1_exon 2_forward	ACGTTGGATGATTGACTTGTGCTCCCCACT
MAP2K1_exon 2_reverse	ACGTTGGATGCCCCAGCTCACTGATCTTCT

Supplementary Table 3. Sequences of extension primers

Extension primer name	Sequence
AKT1_49_extR	CTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACT GACTGACTGACTGACTGACTGACTGAGCCAGGTCTTGATGTACT
BRAF1397_extF	GACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGA CTGACTGACTGACTGACTGGACAAAGAATTGGATCTG
BRAF1406_extR	TGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTG ACTGACTGACTGACTGACTGACTCACTTTCCCTTGTAGACTGTT
BRAF1789_extF	GACTGACTACAGTAAAAATAGGTGATTTTGGT
BRAF1799_extR	GACTGACTGACTGACTGACTGACTGACCCACTCCATCGAGATTTTC
EGFR2156_extF	ACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACCAAA AAGATCAAAGTGCTGG
EGFR2582_extR	GACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGA CTGACTGACTGACTGACTGACTGCTTCCGCACCCAGC
IDH1_394_extR	GACTGACTGGACTGACTGACTGACTGACTGACTGGACTGACTGACTGAGA TCCCCATAAGCATGAC
IDH1_395_extR	TGATCCCCATAAGCATGA
KRAS181_extF	ATTCTCGACACAGCAGGT
KRAS_182_extF	ACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGAT CTCGACACAGCAGGTC
KRAS_183_extR	TGACTGACTGACTGACTGACTGACTGACTGACTGACTGCTCATTGCACTG TACTCCTC
MAP2K1.167_extR	ACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGAC TGACTGACTGACTCCCACCTTCTGCTTC
MAP2K1.171_extR	CTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACT GACTGACTGACCAGTTCTCCCACCTTCTG
MAP2K1.199_extR	ACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGACTGAC TGACTGACTGACTGGCTCACTGATCTTCTCAAAGT