

## Supplementary Data

**SUPPLEMENTARY TABLE S1. GENE MUTATION FREQUENCY IN FAMILIAL ADENOMATOUS POLYPOSIS AND SPORADIC PAPILLARY THYROID CANCER**

<i>Gene</i>	<i>PTC in FAP</i> (n=12)	<i>TCGA of PTC</i> (n=496)	<i>AACR GENIE</i> <i>PTC</i> (n=560)
<i>BRAF</i>	17%	60%	65%
<i>RET</i>	8%	7%	4%
<i>APC</i>	58%	1%	3%
<i>CUX1</i>	25%	1%	3%
<i>KMT2C</i>	33%	1%	2%
<i>TTN</i>	50%	3%	0
<i>TG</i>	8%	3%	0
<i>OBSCN</i>	33%	1%	0
<i>MUC5B</i>	25%	1%	0
<i>EVPL</i>	25%	1%	0
<i>PKHD1</i>	25%	1%	0
<i>DYNC1H1</i>	25%	0.7%	0
<i>DNAH10</i>	25%	0.7%	0
<i>VPS13D</i>	25%	0.7%	0
<i>DST</i>	25%	0.5%	0
<i>PLXNB1</i>	25%	0.5%	0
<i>LAMA5</i>	25%	0.5%	0
<i>TRANK1</i>	25%	0.5%	0
<i>PRDM15</i>	25%	0.5%	0
<i>TNRC18</i>	25%	0.5%	0
<i>PCLO</i>	33%	0.2%	0
<i>MKI67</i>	25%	0.2%	0
<i>FLNA</i>	25%	0.2%	0
<i>VCAN</i>	25%	0.2%	0
<i>XRN1</i>	25%	0.2%	0
<i>DSCAM</i>	25%	0.2%	0
<i>RYR3</i>	25%	0.2%	0
<i>KMT2D</i>	58%	0	0
<i>HSPG2</i>	33%	0	0
<i>MEGF8</i>	33%	0	0
<i>MKL1</i>	25%	0	0
<i>ALKBH7</i>	25%	0	0
<i>CACNA1H</i>	25%	0	0
<i>CCDC168</i>	25%	0	0
<i>FOXD4L5</i>	25%	0	0
<i>HECTD1</i>	25%	0	0
<i>PLD1</i>	25%	0	0
<i>SNRPA1</i>	25%	0	0
<i>OTOF</i>	25%	0	0
<i>RAP1GAP2</i>	25%	0	0
<i>SETD1B</i>	25%	0	0
<i>CDC42BPG</i>	25%	0	0
<i>BOD1L1</i>	25%	0	0
<i>IGFN1</i>	25%	0	0

Mutation frequencies of genes mutated in at least 25% of the sequenced PTCs are listed.

AACR-GENIE, American Association for Cancer Research Genomics Evidence Neoplasia Information Exchange; FAP, familial adenomatous polyposis, *n*, number, PTC, papillary thyroid cancer; TCGA, The Cancer Genome Research Atlas.