

Table S1. Somatic pathogenic genetic alterations affecting the UPS gene family in papillary thyroid carcinomas taken from TCGA.

Tumor Sample	Histology	Gene	¹ Chr.	Position/Cytoband	Mutation type	Alternate Allele	Aminoacid change	PolyPhen	SIFT
TCGA-BJ-A3EZ-01	PTC NOS	<i>USP9Y</i>	Y	14924964	Missense	A > C	<i>p.Tyr1529Ser</i>	possibly_damaging	deleterious
TCGA-CE-A481-01	PTC NOS	<i>USP6</i>	17	5076261	Frameshift_Del	TA > -	<i>p.Met1404Valfs*23</i>	.	.
TCGA-DJ-A13O-01	FVPTC	<i>USP40</i>	2	234468516	Missense	C > A	<i>p.Asp108Tyr</i>	probably_damaging	deleterious
TCGA-DJ-A1QE-01	PTC NOS	<i>USP51</i>	X	55514742	Missense	G > C	<i>p.Leu211Val</i>	possibly_damaging	deleterious
TCGA-DJ-A1QL-01	FVPTC	<i>USP28</i>	11	113705033	Nonsense	G > A	<i>p.Arg187*</i>	.	.
TCGA-DJ-A2Q9-01	PTC with oncocytic cells	<i>USP46</i>	4	53492228	Missense	T > C	<i>p.Gln173Arg</i>	benign	deleterious
TCGA-E8-A2EA-01	PTC NOS	<i>USP43</i>	17	9596525	Missense	C > A	<i>p.Leu479Ile</i>	probably_damaging	deleterious
TCGA-EL-A3GP-01	PTC NOS	<i>USP6</i>	17	5076150	Nonsense	T > A	<i>p.Lyr1366*</i>	.	.
TCGA-EL-A3H5-01	PTC NOS	<i>USP9X</i>	X	41075213	Missense	A > C	<i>p.Lys1798Thr</i>	probably_damaging	deleterious
TCGA-EL-A3MY-01	PTC with oncocytic cells	<i>USP9X</i>	X	41043681	Frameshift_Ins	- > A	<i>p.Pro1105Thrfs*4</i>	.	.
TCGA-EL-A3ZO-01	PTC NOS	<i>USP26</i>	X	132161783	Nonsense_Mutation	G > A	<i>p.Gln156*</i>	.	.
TCGA-EL-A4K7-01	PTC NOS	<i>USP49</i>	6	41767589	Missense	C > A	<i>p.Arg550Leu</i>	probably_damaging	deleterious
TCGA-EM-A22P-01	PTC NOS	<i>USP48</i>	1	22033083	Splice Site	C > G	<i>p.X697_splice</i>	.	.
TCGA-EM-A4FM-01	PTC NOS	<i>USP9X</i>	X	41058005	Splice Site	T > C	<i>p.X1535_splice</i>	.	.
TCGA-ET-A39P-01	PTC with oncocytic cells	<i>USP42</i>	7	6189833	Missense	C > A	<i>p.Pro669Gln</i>	benign	deleterious
TCGA-FE-A2Z2-01	PTC with oncocytic cells	<i>USP9X</i>	X	40988337	Nonsense	G > T	<i>p.Glu61*</i>	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L10</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L11</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L12</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L13</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L15</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L17</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L18</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L19</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L20</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L24</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L25</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L26</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L27</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L28</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L29</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L30</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L6P</i>	4	p16.1	Amplification	.	.	.	.
TCGA-BJ-A0Z0-01	FVPTC	<i>USP17L9P</i>	4	p16.1	Amplification	.	.	.	.

*1 Chr. – Chromosome; PTC, papillary thyroid carcinoma; NOS, Not otherwise specified; FVPTC, follicular variant of papillary thyroid carcinoma.