

**Additional file 7: Table S7.** Primer pairs used to validate thyroid TRAM map.

<b>Gene Symbol</b>	<b>Gene Name</b>	<b>RefSeq RNA GenBank Accession No.</b>	<b>Primer pair sequences (5'→3')<sup>a</sup></b>	<b>RT-PCR product size (base pair)</b>
<b><i>TG</i></b>	Thyroglobulin	NM_003235	gtctgaccagggagcgtttag gtccagatgaagctggaatgag	<b>173</b>
<b><i>RPL41</i></b>	Ribosomal protein L41	NM_001035267	tggaggaagaagcgaatgcgc tcccacaactgtaccagcatc	<b>150</b>
<b><i>B2M</i></b>	Beta-2-microglobulin	NM_004048	ctactctctctttctggcctgg cccagacacatagcaattcagg	<b>114</b>
<b><i>ACTB</i><sup>b</sup></b>	Actin, beta	NM_001101	gagcatcccccaaggtcacaat cttctgtaacaacgcatctcata	<b>99</b>
<b><i>TPO</i></b>	Thyroid peroxidase	NM_000547	tagcgtcttggaggaaagcaag tctgctgctcgggcaatcact	<b>156</b>
<b><i>IYD</i></b>	Iodotyrosine deiodinase	NM_001164694	tgggtcacagacctcaagaaac atgccacaagcgatggaaacac	<b>164</b>
<b><i>SDC2</i></b>	Syndecan 2	NM_002998	aggagtgtatcctattgatgacg gtttcttcaggtgactttgtctg	<b>198</b>

<b><i>TSHR</i></b>	Thyroid stimulating hormone receptor	NM_000369	acttacatagaccctgatgcc gacgtcatgtaagggtgtctg	<b>155</b>
<b><i>SERPINF1<sup>c</sup></i></b>	Serpin family F member 1	NM_002615	ggctgtctccaactcggcta cggatgatggattctgttcg	<b>150</b>
<b><i>MYH9</i></b>	Myosin, heavy chain 9, non-muscle	NM_002473	gcctacaggagtatgatgcaag tcttgctcttgcgaggacg	<b>136</b>
<b><i>BACE2</i></b>	Beta-site APP-cleaving enzyme 2	NM_012105	ggcttacttcctaaaatctcc gaaatgccgaatcggaacattc	<b>142</b>
<b><i>REEP3</i></b>	Receptor accessory protein 3	NM_001001330	actgtgattgaaacagtagccg tccttggtataggagaaagc	<b>105</b>
<b><i>YKT6</i></b>	YKT6 v-SNARE homolog ( <i>S. cerevisiae</i> )	NM_006555	tcttgccaggtgtggtcattgc gcctgcactttagtcattgga	<b>210</b>
<b><i>NTNG1<sup>c</sup></i></b>	Netrin G1	NM_001113226	gaaagtgaaactcgatcctccg ctcgcatcacactcattattgc	<b>102</b>
<b><i>RIPPLY3</i></b>	Ripply transcriptional repressor 3	NM_018962	acctagggctgaccaacacac ctccgcaggtattcttgacgc	<b>105</b>

<i>NPTX1</i> <sup>c</sup>	Neuronal pentraxin 1	NM_002522	gggcaaacttgcaatcgctc tctcctcggtgtcgttctg	<b>193</b>
<i>TBX18</i> <sup>c</sup>	T-box 18	NM_001080508	ctcgggggagactggatgag ctgattctgataggcagtgacg	<b>247</b>

<sup>a</sup>Top: forward primer; bottom: reverse primer (for each gene).

<sup>b</sup>Only for this gene the primers were designed on the same exon using the sequence aligned to the hybridization probe.

<sup>c</sup>These primer pairs were used for the first time in a previous work (Caracausi et al., 2014).