

Table 2. Predicted 36 known genes that carry the promoter module

Gene	Name or description	Locus
<i>AMPD2</i>	Adenosine monophosphate deaminase 2	Loc271
<i>ARHGD1B</i>	Rho GDP dissociation inhibitor beta	Loc397
<i>ATP6V0D1</i>	ATPase, H ⁺ transporting, lysosomal 38kDa, V0D1	Loc9114
<i>BSPRY</i>	B-box and SPRY domain containing	Loc54836
<i>CDH5</i>	Cadherin-5, type 2, VE-cadherin	Loc1003
<i>CHRNA1</i>	Cholinergic receptor, nicotinic, alpha polypeptide 1	Loc1134
<i>CN2</i>	Cytosolic nonspecific dipeptidase	Loc55748
<i>CNN2</i>	Calponin2	Loc1265
<i>CTEN</i>	C-terminal tensin-like	Loc84951
<i>E2F1</i>	E2F transcription factor 1	Loc1869
<i>ELP3</i>	Elongation protein 3 homolog	Loc55140
<i>ESAM</i>	Similar to endothelial cell-selective adhesion molecule	Loc90952
<i>FCGR1A</i>	Fc fragment of IgG, high affinity Ia	Loc2209
<i>GALK2</i>	Galactokinase 2	Loc2585
<i>GRN</i>	Granulin	Loc2896
<i>JUNB</i>	Jun B proto-oncogen	Loc3726
<i>KRTHA5</i>	Keratin, hair, acid, 5	Loc3886
<i>LRAP</i>	Leukocyte-derived arginine aminopeptidase	Loc64167
<i>MAN1B1</i>	Mannosidase, alpha, class 1B, member 1	Loc11253
<i>MPHOSPH1</i>	M-phase phosphoprotein 1	Loc9585
<i>MYD88</i>	Myeloid differentiation primary response gene (88)	Loc4615
<i>NISCH</i>	Nischarin	Loc11188
<i>NUDT8</i>	Nudix-type motif 8	Loc254552
<i>PAX5</i>	Paired Box Gene 5	Loc5079
<i>PEX10</i>	Peroxisome biogenesis factor 10	Loc5192
<i>PPP1R9A</i>	Protein phosphatase 1, regulatory (inhibitor) subunit 9A	Loc55607
<i>RAB5C</i>	RAB5C, member RAS oncogene family	Loc5878
<i>SEMA3A</i>	Semaphorin3A	Loc10371
<i>SLC33A1</i>	Solute carrier family 33 (acetyl-CoA transporter), member 1	Loc9197
<i>SOX3</i>	SRY-box 3	Loc6658
<i>SPRR1B</i>	Small proline-rich protein 1B (cornifin)	Loc6699
<i>TBX10</i>	T-box 10	Loc347853
<i>TJP1</i>	Tight junction protein 1 [zona occludens 1 (ZO-1)]	Loc7082
<i>TTN</i>	Titin	Loc7273
<i>UBP1</i>	Upstream-binding protein 1 (LBP-1a)	Loc7342
<i>ULBP3</i>	UL16 binding protein 3	Loc79465

The described promoter model was found in 36 genes with known function by screening a human promoter library containing >50,000 predicted/verified human promoters. In several of these promoters, the model was not phylogenetically conserved or was found in alternative promoters. In addition to ZO-1, six additional genes (shown in bold) showing conservation of the predicted proximal promoter over at least two species and localized within the 500 bp upstream of the transcription start site were subsequently analyzed.