

SUPPLEMENTARY MATERIAL

Identification and characterization of a novel 5 bp deletion in a putative insulin response element in the lipoprotein lipase gene, *by* L-X Yang, H. Razzaghi, J.E. Hokanson, M.I. Kamboh.

Supplementary Fig. 1. pGEM-4Z Vector Cloning Strategy. **a)**: Cloning sites in the pGEM-4Z vector. **b)**: Fragments of the LPL promoter (1537 bp) and LPL cDNA (3.6 kb). **c)**: Cloning of LPL promoter and LPL cDNA in the pGEM-4Z vector. **d)**: The pGEM-4Z vector containing the Tag (tgatgatga) sequence before the stop codon (TGA). **e)**: pGEM-4Z vectors containing LPL exon 10 wild type (WT), 5 bp deletion (Mut1) and deleted 19 bp IRE sequence (Mut2).

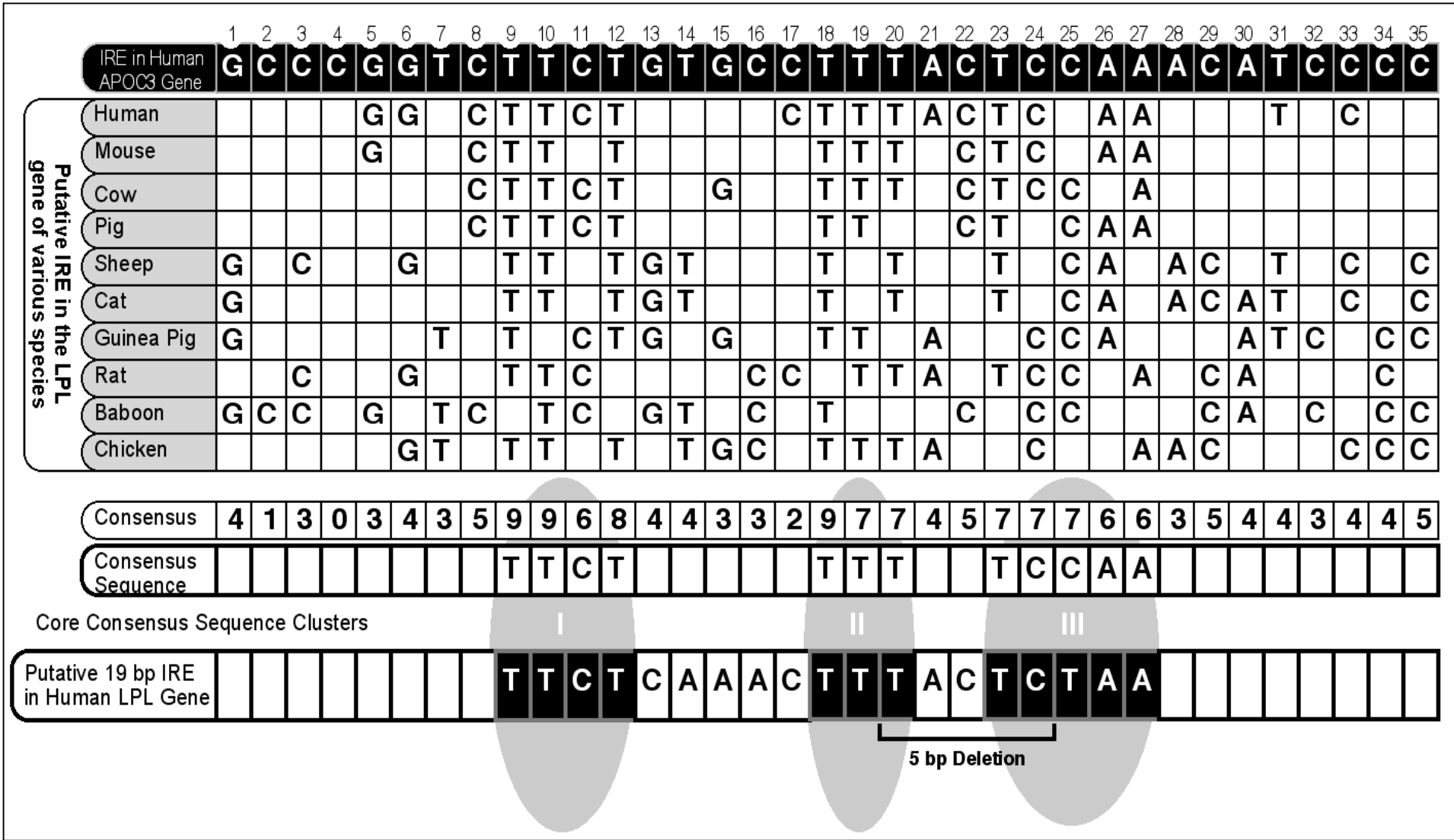
Supplementary Fig. 2. The sequence of the insulin response element (IRE) in the APOC3 gene (top) was used to find IRE in ten species. Three core consensus sequences labeled I, II, III, within a 19 bp stretch (positions 9-27 in the APOC3 gene). Following are the computed *P*-values for the probability of a nucleotide match at a specific position on the table, given *N* = 10 (the number of species) and *P* = 0.25 (chance of match for A, C, G, or T). *P*-value of greater than 0.01 was set as a minimum for scoring. Therefore, the number of matches must be greater than 5 in order to be counted in the consensus sequence.

Number of Matches	Probability	P-value
0	0.0563	0.9347
1	0.2440	0.7560
2	0.5256	0.4744
3	0.7759	0.2241
4	0.9219	0.0781
5	0.9803	0.0197
6	0.9965	0.0035
7	0.9996	0.0004
8	0.9999	2.96×10^{-5}
9	0.9999	9.54×10^{-7}
10	1	<0.0001

pGEM-4Z Vector Cloning Strategy



Supplementary Figure 1



Supplementary Figure 2