

**Table S1. List of the DNA sequences used in the different studies**

DNA name (length)	Sequence	RE type/gene
<i>tra</i> ERRE (13)	GC <u>TCAAGGTCAC</u> CG <u>AGTTCCAGTG</u>	ERRE/TRalpha
<i>tra</i> ERRE (26)	CTG <u>TCAAGGTCA</u> CACAGTGAGTTACC GAC <u>AGTTCCAGT</u> GTGTCACTCAATGG	ERRE/TRalpha
<i>tra</i> ERRE (29)	AATTG <u>TCAAGGTCA</u> CACAGTGAGTTACCG AAC <u>AGTTCCAGT</u> GTGTCACTCAATGGCTT	ERRE/TRalpha
<i>tra</i> ERRE (33)	CGATTT <u>TCAAGGTCA</u> CACAGTGAGTTACCGGC GCTAAAC <u>AGTTCCAGT</u> GTGTCACTCAATGGCCG	ERRE/TRalpha
<i>lf</i> ERRE (33)	GGCACCT <u>TCAAGGTCA</u> TCTGCTGAAGAAGATAG CCGTGGA <u>AGTTCCAGT</u> AGACGACTTCTTCTATC	ERRE/lactoferrin
<i>tff1</i> ERRE (26)	GGA <u>TTAAGGTCA</u> GGTTGGAGGAGACG CCT <u>AATTCCAGT</u> CCAACCTCCTCTGC	ERRE/tff1-ps2
<i>tff1</i> ERE/IR3 (26)	CCTGCA <u>AGGTCA</u> CGGT <u>TGGCCA</u> CCCGC GGACGT <u>TCCAGT</u> GCC <u>ACCGGT</u> GGGCG	IR3/tff1-ps2
<i>rb1cc1</i> IR3 (26)	CCAAGA <u>AGGTCA</u> AAT <u>TCACCT</u> TGGGC GGTTCT <u>TCCAGT</u> TTA <u>AGTGGA</u> ACCCG	IR3/rb1cc1
<i>rb1cc1</i> IR3 (33)	TCCGCAAAGA <u>AGGTCA</u> AAT <u>TCACCT</u> TGGGAAAG AGGCGTTTCT <u>TCCAGT</u> TTA <u>AGTGGA</u> ACCCTTTC	IR3/rb1cc1
embERRE/IR3 (26)	ATG <u>TCAAGGTCA</u> CCGTGACCTTTACG TAC <u>AGTTCCAGT</u> GGCACTGGA AATGC	embedded ERRE/IR3
embERRE/IR3 (29)	ATTG <u>TCAAGGTCA</u> CCGTGACCTTTACCGA AAC <u>AGTTCCAGT</u> GGCACTGGA AATGGCTT	embedded ERRE/IR3

embERRE/IR3 (33)	GAAATTG <u>TCAAGGTCA</u> CCGTGACCTTTACCGCC CTTTAAC <u>AGTTCCAGT</u> GGCACTGGAATGGCGG	embedded ERRE/IR3
abcc5 ERRE/IR3 (26)	CCG <u>TGAAGGTCA</u> TCGTAGCCCGCGTC GGCACTTCCAGTAGCATCGGGCGCAG	embedded ERRE/IR3/abcc5
5'tff (26)	CCTGCAAGGTCACCGTGACCTTTACG GGACGT <u>TCCAGT</u> GGCACTGGAATGC	Chimera
5'emb (26)	ATG <u>TCAAGGTCA</u> CGGTGGCCACCCGC TACAGTTCCAGTGCCACCGGTGGGCG	Chimera
destabPu (26)	ATG <u>TCAAGGTCA</u> CCGTGACCACCACG TACAGTTCCAGTGGCACTGGTGGTGC	mutant
Pu (26)	CCTGCAAGGTCACGGTGGCCTTTCGC GGACGT <u>TCCAGT</u> GCCACCGGAAGCG	mutant
IR3mutA7T(26)	CCTGCAAGGTCACGGTGGCCTCCCGC GGACGT <u>TCCAGT</u> GCCACCGGAGGGCG	mutant
embmutT7A(26)	ATG <u>TCAAGGTCA</u> CCGTGACCAATTACG TAC <u>AGTTCCAGT</u> GGCACTGGTAATGC	mutant
3'IR3TAA(26)	ATG <u>TCAAGGTCA</u> CGGTGGCCATTAGC TACAGTTCCAGTGCCACCGGT <u>AATCG</u>	mutant