Supplementary method 1: Production of HNF1α and β antibodies.

We first synthesized three different HNF1α PCR amplicons (amplicon 884/885, amplicon 886/887 and amplicon 888/890) performing PCR with HNF1α rat cDNA and oligonucleotides 5′-TATGGATCCTACCCGGGCCCTACCTGA-3′(884) and 5′-GCTGAGCCACCGCGAAGTCTTCCCCAT-3′(885), 5′-AGACTTCGCGGTGGCTCAGCAATTCAC-3′(886) and 5′-CGTTATACGTCAGCTCATCACCTGTGG-3′(887) as well as 5′-TGATGAGCTGACGTATAACGGGCCTCC-3′(888) and 5′-TACGCCCGGGTTACTGGGAGGAGGAGG-3′(890) to. In a next step we constructed the fusion amplicon 884/887 by SOE PCR of amplicon 884/885 and amplicon 886/887 together with oligonucleotides 884 and 887. A last SOE PCR step with oligonucleotides 884 and 890 combined amplicons 884/887 and 888/890 to the final HNF1α DNA fusion construct 884/890. Accordingly we obtained the final HNF1β DNA fusion construct using HNF1β rat cDNA and oligonucleotides 5′-TATGGATCCTAGAGGAATTACTGCCGTC-3′(891) and 5′-GTCGGAGGATAGTGTCATAGTCGTCGC-3′(892), 5′-CTATGACACTATCCTCCGACAGTTCAAC-3′(893) and 5′-AGCTATAGGCCTCAGAGCAGGCGTCC-3′(895) as well as 5′-CTGCTCTGAGGCCTATAGCTCCAACCA-3′(896) and 5′-AACTCCCGGGTCACCAGGCTTGCAGTG-3′(897). Each final DNA construct was subsequently digested with *Bam*HI and *Eco*RI and cloned in phase into the GST expression vector pGex-3X (Pharmacia Biotech).

Each final DNA construct was cloned in phase into the GST expression vector pGex-3X (Pharmacia Biotech) giving rise to expression vectors pGex-HNF1α-NC-AR and pGex-HNF1β-NC-AR. Thus, pGex-HNF1α-NC-AR encodes a fusion polypeptide comprising the rat HNF1α amino acids Pro-33 to Ala-83, Val-173 to Leu-195 and Thr-285 to Thr-562 (due to the cloning procedure one Leu was added to the N-terminus of Pro-33) whereas pGex-HNF1β-NC-AR encodes the rat HNF1β amino acids Leu-30 to Thr-88, Ile-179 to Glu-225 and Ala-317 to Trp-558. Each expression vector was used to transform the *E. coli* low protease strain BL21(DE3)[pLysS]. Fusion polypeptides were produced and purified on immobilized glutathione, essentially as described previously (Smith and Johnson, 1988). Immunizations were performed according to standard immunization protocols by Eurogentec. The obtained crude polyclonal rabbit sera will be consecutively referred to as α-HNF1α-NC-AR and α-HNF1β-NC-AR.

References

Smith, D.B. and Johnson, K.S. (1988) Single-step purification of polypeptides expressed in Escherichia coli as fusions with glutathione S-transferase. *Gene*, **67**, 31-40.