

## Supplementary material

**Table S1.** Gene primers and annealing condition.

Genes	Sequence of primers	Temperature
Occludin	S – AAC AGC CCC CTA ATG TGG AAG AS – GAG TAG GCC ATT GGA ACT GTCG	60°C
ZO-1	S – CTC GCA CGT ATC ACA AGC TGA AS – CCT CAG GAT ATG GCT CCT TCC	60°C
Claudin-2	S – AGG ACT TCC TGC TGA CAT CCA AS – TCC ACC CAC TAC AGC CAC TCT	60°C
Claudin-15	S – GAC CTC TCC AGA AAG GCC AAG AS – AGA TAG CAA CCA ATG CCA CAGG	58°C
NHE3	S – CTC TGG GGC AGG AAT TGA TA AS – AGA TAG CAA CCA TGC CAC AAG	58°C
CFTR	S – GCA ATG GGC TGT GAA CTC AA AS – ACC TCC AGA GGG CCA GGT AT	60°C
SGLT-1	S – GCT GGA GTC TAC GTA ACA GCA CA AS – GGG CTT CTG CAT CTA TTT CAA TG	58°C
PEPT-1	S – AGC AGA GAT CGA GGC ACA GT AS – TTC CCT ACG CCC TTT TTC TT	60°C
GAPDH	S – GTT ACC AGG GC TGCC TTC TCT AS – AAC TTG CCG TGG GTA GAG TCA	60°C

S: sense primer (5'-3'); AS: antisense primer (3'-5'); reference gene: GAPDH.

**Figure S1.** Serum albumin levels and nitrogen balance in MetS-D. **A**, Serum albumin levels and nitrogen balance values in MetS-D and control animals (n= 6–10). **B**, Nitrogen balance values correspond to ingested nitrogen (g protein/6.25) subtracted from excreted nitrogen (24h urea g x 0.47). Data are reported as mean  $\pm$  SE. \*P<0.05; unpaired data, Student's *t*-test.

