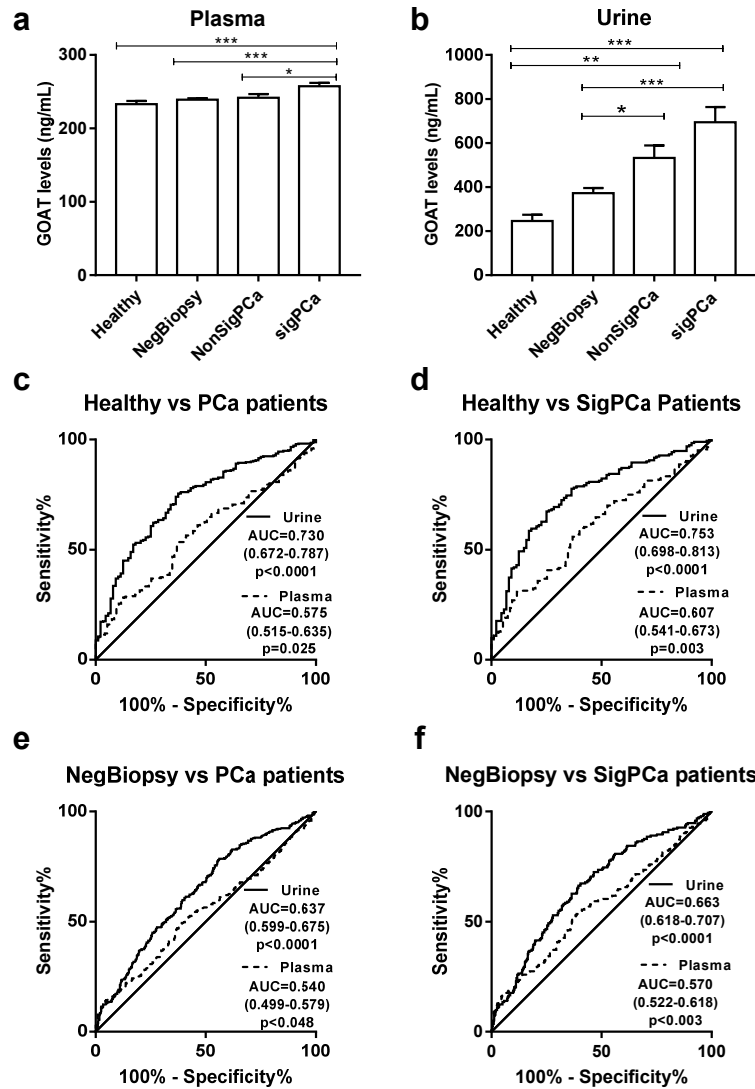
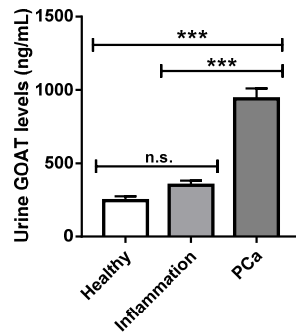


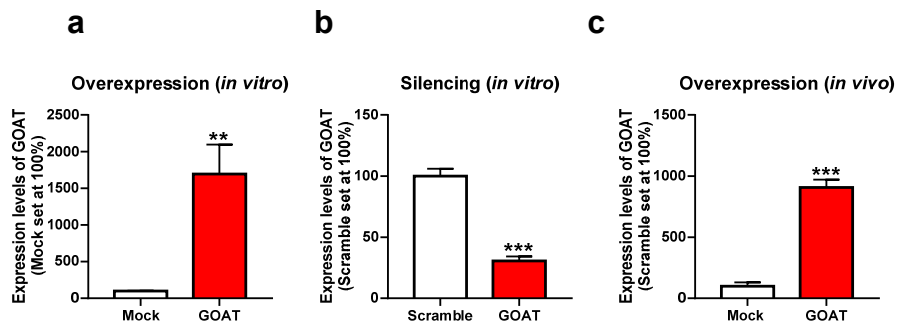
## Supplementary Figures:



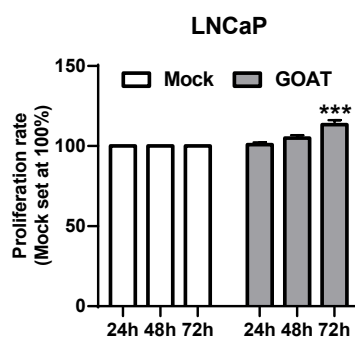
**Supplemental Figure S1.** GOAT levels in urine and plasma from patients with and without PCa. Levels of GOAT in plasma (a) and urine (b) of healthy individuals ( $n = 97$ ), patients with suspect of PCa but negative result in the biopsy (NegBiopsy;  $n = 549$ ), patients diagnosed with non-significant PCa (NonSigPCa;  $n = 143$ ) and patients diagnosed with significant PCa (SigPCa;  $n = 204$ ). Data represent mean  $\pm$  SEM. c-f) Comparison of the receiver operating characteristic (ROC) curves analyses of urine (solid line) and plasma GOAT (dashed line) capacity to discriminate between healthy individual and PCa patients (c), healthy individuals and SigPCa patients (d), NegBiopsy and PCa patients (e), or NegBiopsy and SigPCa patients (f). Asterisks (\*,  $p < 0.05$ ; \*\*,  $p < 0.01$ , \*\*\*,  $p < 0.001$ ) indicate values that significantly differ between groups.



**Supplemental Figure S2.** Comparison of urine GOAT levels among healthy individuals ( $n = 97$ ), patients with prostatic inflammatory diseases ( $n = 211$ ) and PCa patients ( $n = 347$ ). Data represent mean  $\pm$  SEM. Asterisks (\*\*\*,  $p < 0.001$ ) indicate values that significantly differ between groups. n.s.: non statistically significant differences.



**Supplemental Figure S3.** Validation of *GOAT* overexpression (a) and silencing (b) in DU145 cells. (c) Validation of *GOAT* overexpression in the xenograft tumors. mRNA levels were determined by qPCR and adjusted by a normalization factor (calculated with the expression levels of *ACTB* and *GAPDH* using GeNorm). Data represent percentage of control cells (mock or scramble; mean  $\pm$  SEM). Asterisks (\*\*,  $p < 0.01$ , \*\*\*,  $p < 0.001$ ) indicate values that significantly differ between groups.



**Supplemental Figure S4.** Cell proliferation rate (determined by Alamar-Blue assay) at 24, 48 and 72 h in response to *GOAT* overexpression in LNCaP cells. One experiment was carried out ( $n = 1$ ) with four technical replicates. Results are referred as percentage of mock. Statistically differences were calculated using the technical replicates. Asterisks (\*\*\*,  $p < 0.001$ ) indicate values that significantly differ between groups.