

**Supplementary Table 5.** Functional characterization and association with malignancy of 9 proteins with differential abundance in PCa identified in this study in more than one group comparison.

Protein name	Gene Name	Protein abundance in PCa in this study	Molecular/biological function(s)	Classification and involvement in disease	Association with PCa (proteomics studies)	Associations with cancer other than PCa (proteomics studies)	Association with cancer (genomics and functional studies)
Azurocidin	AZU1	↓	This gene encodes a preproprotein that is proteolytically processed to generate a mature azurophil granule antibiotic protein, with monocyte chemotactic and antimicrobial activity. It is also an important multifunctional inflammatory mediator.			Up-regulated in gastric cancer [1];	Potential biomarker for myelofibrosis [2];
Ig gamma-1 chain C region	IGHG1	↓	/	/		Up regulated in pancreatic cancer tissue [3]; Differentially expressed in serum samples from glioma patients [4]; Up regulated in human pancreatic carcinomas [5]; Down-regulated in infiltrating ductal carcinomas of the breast [6];	IgG silencing induces apoptosis and suppresses proliferation, migration and invasion in LNCaP prostate cancer cells [7];
Non-secretory ribonuclease	RNASE2	↑	The protein encoded by this gene is a non-secretory ribonuclease that belongs to the pancreatic ribonuclease family, a subset of the ribonuclease A superfamily. The protein antimicrobial activity against viruses.				Up-regulated in colorectal cancer [8]; Up-regulated in childhood acute lymphoblastic leukemia [9];
Pregnancy zone protein	PZP	↓	/			Down-regulated in malignant breast cancer cell lines [10,11];	Up-regulated in esophageal cancer [12];
Lithostathin e-1-alpha	REG1A	↑	This gene is a type I subclass member of the Reg gene family. The Reg gene family is a multigene family grouped into four subclasses, types I, II, III and IV, based on the primary structures of the encoded proteins. This gene encodes a protein that is secreted by the exocrine pancreas. It is associated with islet cell regeneration and diabetogenesis			Up regulated in bladder cancer tissues compared with adjacent normal samples [13]; Up regulated in serum of pancreatic ductal adenocarcinoma patients compared to healthy controls [14]; Up regulated in cancer pancreatic ductal fluid compared to normal [15]; Biomarker for early pancreatic lesions [16]; Up regulated in gastric cancer tissues [17]; Up regulated in breast cancer tissues [18];	Overexpressed in non-small cell lung cancer [19]; Overexpressed in colorectal cancer [20,21];

			and may be involved in pancreatic lithogenesis.		
Alpha-amylase 1	AMY1A	↑	This gene encodes an amylase isoenzyme produced by the salivary gland. It catalyzes the first step in digestion of starch and glycogen.	Up regulated in lung cancer [22];	Up regulated in lung cancer [23];
Pancreatic alpha-amylase	AMY2A	↑	This gene encodes a member of the alpha-amylase family of proteins produced by the pancreas.	Up regulated in lung cancer [22];	Candidate tumor-suppressor gene loss in gastric carcinoma [24]; Marker for lung cancer [25]; Up regulated in lung cancer [23];
Actin_gamma-enteric smooth muscle	ACTG2	↑	The beta and gamma actins co-exist in most cell types as components of the cytoskeleton and as mediators of internal cell motility. This gene encodes actin gamma 2; a smooth muscle actin found in enteric tissues. Alternative splicing results in multiple transcript variants encoding distinct isoforms.	Up regulated in hepatocellular carcinoma and strongly correlated with the epithelial-mesenchymal transition process [26]; Biomarker for leiomyosarcomas [27];	Biomarker for breast cancer [28]; Biomarker for colon cancer [29]; Biomarker for estimating chemotherapy sensitivity of colorectal cancer [30]; Differentially expressed in osteosarcoma [31]; Diagnostic marker for malignant pleural mesothelioma [32]; Marker for cisplatin resistance in breast cancer [33];
Collagen alpha-1(XVIII) chain	COL18A1	↑	This gene encodes the alpha chain of type XVIII collagen. This collagen is one of the multiplexins, extracellular matrix proteins that contain multiple triple-helix domains (collagenous domains) interrupted by non-collagenous domains. A long isoform of the protein has an N-terminal domain that is homologous to the extracellular part of frizzled receptors. Proteolytic processing at several endogenous cleavage sites in the C-terminal domain results in production of endostatin, a potent antiangiogenic protein that is able to inhibit angiogenesis and tumor growth. Alternative splicing results in multiple transcript variants.	Mutations in this gene are associated with Knobloch syndrome. The main features of this syndrome involve retinal abnormalities, so type XVIII collagen may play an important role in retinal structure and in neural tube closure.	Up regulated in cutaneous squamous cell carcinoma [34]; Differentially expressed between the chromophobe renal cell carcinoma and normal tissues [35]; mRNA levels of collagen XVIII are decreased in liver cancer [36]; Hepatocellular carcinoma is associated with a significant decrease in the expression of the collagen XVIII [37]; Down regulated in metastasis melanomas [38];

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