Electronic supplementary material (ESM)

Supplementary materials

Table S1. Oligonucleotide sequences

Accession number	Target gene (size)	Primer name		Sequence (5-' to 3'-)	Oligo used for
NM_007343.3	*PRSS3-V1/TRY4* (124 bp)	*V1*	F	CTGCGAGGCGCTGGG	RT-PCR
			R	GCAGAAGTGGGAGCCAGAAT	
NM_002771.3	*PRSS3-V2* (140 bp)	*V2*	F	ATCCTTGCCTTTGTGGGAGC	
			R	GCAGAAGTGGGAGCCAGAAT	
NM_001197097.2	*PRSS3-V3* (129 bp)	*V3*	F	GTGCGCCATTGGTTTTCCAT	
			R	GCAGAAGTGGGAGCCAGAAT	
NM_001197098.1	*PRSS3-V4* (131 bp)	*V4*	F	CGACTCGCATGGGACCTG	
			R	GCAGAAGTGGGAGCCAGAAT	
PRSS3 - Common Region (101 bp)		*Vc*	F	ATTCTGGCTCCCACTTCTGC	
			R	CTCTCCCAGTCTCACCTGGA	
NM_002046	GAPDH (189 bp)	*GAPDH*	F	GAGGCGGAGGAGAACAAACA	
			R	CCATGGAGAAGGCTGGG	
NC_000009.12 (33750466 to 33799231)	*PRSS3* (152 bp)	MF		GGTACGCGGATAGGGAGGGGATATC	MSP
		MR		TAATATACGCATCGATACCGCAACCCG	
	PRSS3 (155 bp)	UF		GGGTATGTGGATAGGGAGGGGATATT	
		UR		AATAATATACACATCAATACCACAACCCA	
	PRSS3 (286 bp)	BF		TTGATTTGTATGGGATTTGTGG	BQ
		BR		ACCTTCCCCTCACCCTACAAC	
NM_007343.3	*PRSS3*	*PRSS3/TRY4*	F	GGAGGATGTGCGGACCTGACGACAG	cDNA construct
			R	GATCTTAGCTGTTGGCAGCGATGGTGTCCTT	
PRSS3 - Common Region		si*PRSS3-1*		GGGACACUCUGGACAAUGA	RNA inference
		siPRSS3-2		GAUCAUCCGCCACCCUAAA	

GAPDH: glyceraldehyde-3-phosphate dehydrogenase; F: forward; R: reverse; M: methylated, U: unmethylated.

Supplementary Table 2 Summary of transcript variants and isoforms from human *PRSS3* gene

Aliases for *PRSS3* Gene by Gene Card	mRNA Transcript Variants								Protein Isoforms				
	ACCESSION No.	Location (NC_000009.12)		Span	Full Name	Preferred Symbol	Exon	Size (bp)	Full Name	Preferred Name	Aliases	Protein ID	AA	MW (Kd)
Protease, Serine 3; Protease, Serine, 3 (Mesotrypsin); Mesotrypsinogen; Mesotrypsin; MTG; Protease, Serine, 4 (Trypsin 4, Brain); Brain Trypsinogen; Trypsin-3; Trypsinogen 4; Trypsinogen 5; Trypsin III; Pancreatic Trypsinogen III; Trypsin IV; Trypsinogen IV; TRY3; TRY4; PRSS4; Serine Protease 3; Serine Protease 4; EC 3.4.21.4; EC 3.4.21; T9	NM_007343.3.	33,750,466	33,799,231	48,766	Trypsinogen transcript variant 1	*PRSS3-V1 (V1)*	5	1032	trypsin-3 isoform 1 preproprotein	Trypsinogen 4 (TRY4)	Trypsinogen 4 / Isoform A / Brain form	NP_031369.2.	304	32.5
	NM_002771.3.	33,795,561	33,799,231	3,671	Trypsinogen transcript variant 2	*PRSS3-V2 (V2)*	5	823	trypsin-3 isoform 2 preproprotein	Mesotrypsinogen (MTG)	Trypsinogen 3 / Mesotrypsinogen (MTG) / Isoform C	NP_002762.2.	247	26.7
	NM_001197097.2	33,750,466	33,799,231	48,766	Trypsinogen transcript variant 3	*PRSS3-V3 (V3)*	6	1160	trypsin-3 isoform 3 preproprotein	trypsin-3 isoform 3	Trypsinogen IV / Isoform B	NP_001184026	261	28.2
	NM_001197098.1	33,750,821	33,799,231	48,411	Trypsinogen transcript variant 4	*PRSS3-V4 (V4)*	5	803	trypsin-3 isoform 4 preproprotein	trypsin-3 isoform 4	Trypsinogen 5 / New form	NP_001184027	240	25.9

Supplementary Figure

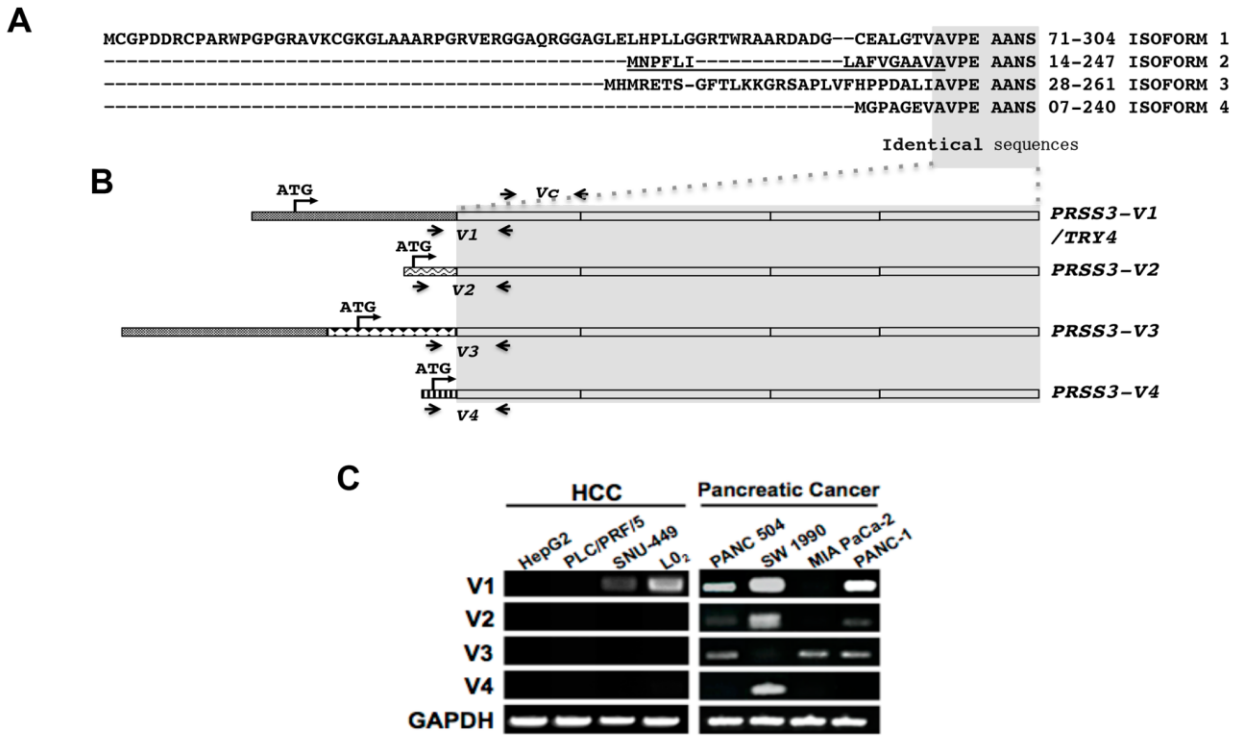

Fig. S1 A. Alignment of the amino acid sequences of the PRSS3 isoforms. The sequences highlighted in gray indicate the identical sequences among the isoforms. The underlined sequences indicate a signal peptide. B. A schematic representation of the human *PRSS3* gene illustrating the existence of exons for each transcript variant. The position of RT-PCR primers is indicated by black arrows. C. The mRNA expression of PRSS3 variants in human HCC and pancreatic cancer cell lines analyzed by semi-quantitative RT-PCR. The constituent and abundant expression of *PRSS3* in pancreatic cancer cell lines was selected as endogenous internal controls to ensure assay reliability. V1-V4: the RT-PCR products of PRSS3-V1 to V4; GAPDH: the internal control.