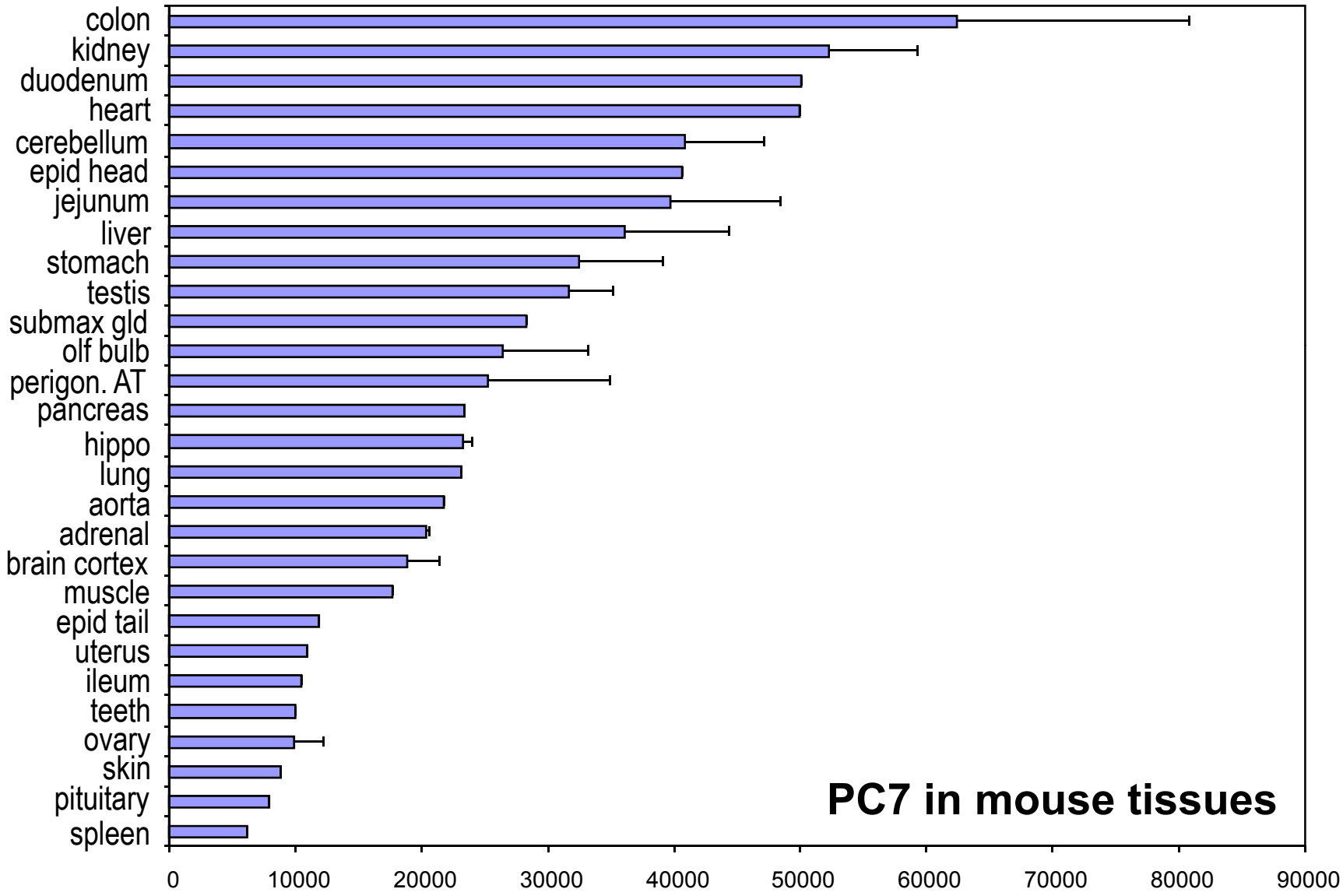
SUPPLEMENTAL FIGURE LEGENDS

Fig. S1. **Relative mRNA expression of mouse PC7 in different tissues.** Quantitative polymerase chain reactions were performed on RNA isolated from mouse tissue using specific oligonucleotides for mouse PC7 and normalized to 10^6 S16 mRNA levels, as described in the Experimental Procedures.

Fig. S2. **PC7 traffics through an unconventional pathway in COS-1 cells.** Immunostaining of PC7 (*red labeling*) and LDLR (*green labeling*) under non-permeabilizing conditions in COS-1 cells expressing either r-PC7 or human LDLR as control, treated or not with BFA (5 μg/ml) for 6h. Nuclei were stained with Hoescht 33258 (*blue labeling*). *Bars* = 10 μm.

Fig. S3. **PC7 does not induce ER stress.** Xbp-1 mRNA splicing from HEK293 cells expressing, or not, r-PC7 or treated for 4h with tunicamycin (5 μg/ml), was assessed by RT-PCR. A 263 bp amplicon (*s*) was generated from spliced Xbp-1 in cells treated with tunicamycin, whereas only an unspliced (*u*) Xbp-1 amplicon (289 bp) was detected in HEK293 cells transfected with r-PC7, demonstrating that PC7 does not induce ER stress.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olf bulb
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pancreas
hippo
lung
aorta
adrenal
brain cortex
muscle
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PC7 in mouse tissues

Figure S1

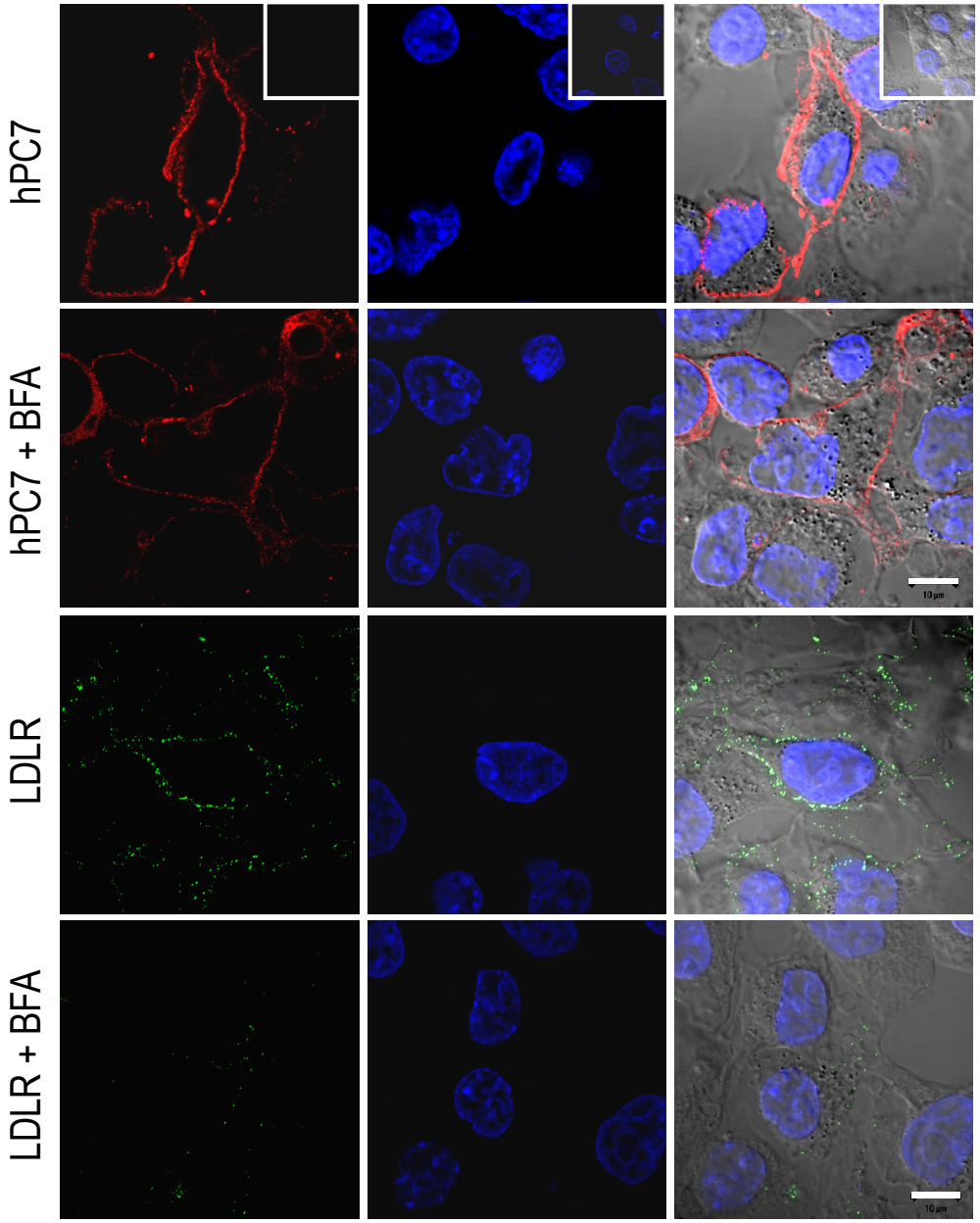

Figure S2

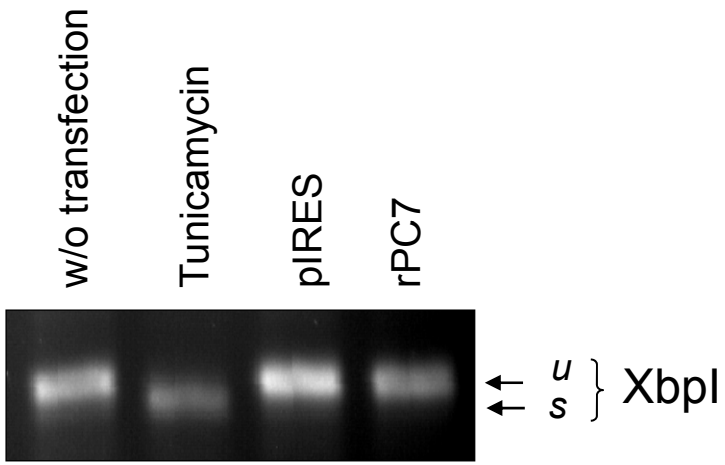

Figure S3

Table S1. Oligonucleotides used for site-directed mutagenesis of PC7 and for the swapping of CT and TMCT of PC7 and Furin.

Mutants	Sense	Antisense
h-PC7 (C699A, C704A)	CAAGTTGCTAGGAGTGGACCC GCCCACTGGCCCC	GTGGGCGGGTCCACTCCTAGC AACTTGATTGG
h-PC7$_{CT\text{-}Furin}$	GGAAGTATATTTGCGCTCTGGC TTTAGTTTTCG	CCAGAGCGCAAATATACTTCCA GCATGTAGTAAAC
h-PC7$_{TMCT\text{-}Furin}$	CTCAAGACCGTGGTGGCCGG CC	GGCCACCACGGTCTTGAGGGT GTTGGGGG
h-Furin$_{CT\text{-}PC7}$	GCAGCTGAGCCAGAGGAATGT GG	CCTCTGGCTCAGCTGCAGGAC CAGG
h-Furin$_{TMCT\text{-}PC7}$	GCCTGAGCTGGTGCTGGTAGG CTG	GCACCAGCTCAGGCAGGTGTG AGGG

Table S2: Oligonucleotides used for quantitative real time-PCR.

Mutants	Sense	Antisense
Mouse PC7	GTTATCAGGGATGTAGGAGA	AAGGGTCTTGAGTGTGTTAG
Mouse S16	AGGAGCGATTTGCTGGTGTGG	GCTACCAGGGCCTTTGAGATG