

**Table S1.** Sequences of PCR primers used for mouse genotyping

<b>Detection of <i>Spint1</i> alleles</b>		<b>Ta=55°C</b>
WT Forward	5'-ctgtctgtttacctgtctcg-3'	
WT Reverse	5'-taaagggatgttgcctggg-3'	
KO Forward	5'-gagaattcctagaggtacc-3'	
KO Reverse	5'-ggtagttgagggaacatggc-3'	
<b>Detection of <i>Spint2</i> alleles</b>		<b>Ta=55°C</b>
WT Forward	5'-aacacatttcaccaccatgc-3'	
WT Reverse	5'-ccagacttcctaagtggg-3'	
KO Forward	5'-atctgcaacctcaagctagc-3'	
KO Reverse	5'-cagaaccagcaactgaagg-3'	
<b>Detection of <i>St14</i> alleles</b>		<b>Ta=55°C</b>
WT Forward	5'-cagtgtgttcagcttctctt-3'	
KO Forward	5'-gcatgctccagactgcctg-3'	
WT and KO Reverse	5'-gtggaggtggagtctcatagc-3'	
<b>Detection of <i>Prss8</i> null and wildtype alleles</b>		<b>Ta=55°C</b>
WT Forward	5'-ccaacggccttactgtactgt-3'	
<i>fr</i> Forward	5'-tttccaacggccttactgtactga-3'	
WT and <i>fr</i> Reverse	5'-ccctccatgggacaagagagt-3'	
<b>Detection of <i>Prss8</i> knockin alleles</b>		<b>Ta=55°C</b>
Forward	5'-gcagctcgaggtaccactcatcagc-3'	
Reverse	5'-aactcacaatgctgccaagtacc-3'	

**Table S2.** List of primary antibodies used in the study

<b>Immunohistochemistry</b>			
<b>Primary</b>			
<b>Antigen</b>	<b>Manufacturer</b>	<b>Cat. No.</b>	<b>Concentration</b>
CD31/PECAM-1	Santa Cruz Biotechnology, Santa Cruz, CA	sc-1506-R	2 ug/ml
HAI-1	R&D Systems, Minneapolis, MN	AF1048	1 ug/ml
Matriptase	R&D Systems	AF3926	2 ug/ml
Prostasin	BD Transduction Laboratories, San Jose, CA	612173	2 ug/ml
<b>Secondary</b>			
Anti-mouse	Vector Laboratories, Burlingame, CA	BA-9200	2.5 ug/ml
Anti-goat	Vector Laboratories	BA-5000	2.5 ug/ml
Anti-rabbit	Vector Laboratories	BA-1000	2.5 ug/ml
Anti-sheep	Pierce, Rockford, IL	31840	2.5 ug/ml
<b>Western Blot</b>			
<b>Primary</b>			
Matriptase	R&D Systems	AF3926	1 ug/ml
Prostasin (tissues)	BD Transduction Laboratories	612173	1 ug/ml
Prostasin (complex formation)	R&D Systems	AF4599	0.5 ug/ml
<b>Secondary</b>			
Anti-sheep	Sigma, St.Louis, MO	A5187	1 ug/ml
Anti-mouse	Dako Cytomation, Carpinteria, CA	D0486	1 ug/ml