Supplemental Legends

Supplemental Figure S1. Knockdown of *PRSS3* in PC3-M cells significantly reduced migration through uncoated filters in transwell assays (bars, SEM; n=4; *, p=0.0115).

Supplemental Figure S2. PC3-M cells transduced with nontarget control virus (NT) or with *PRSS3*-targeted shRNA virus (KD) were grown in Matrigel in serum-free media for 3 days and then photographed. Addition of 100 nM active recombinant human mesotrypsin to KD cells for the duration of the 3-day culture period reconstituted the invasive morphological phenotype (right panel). Scale bar, 100 ⌈m.