## Supporting Information

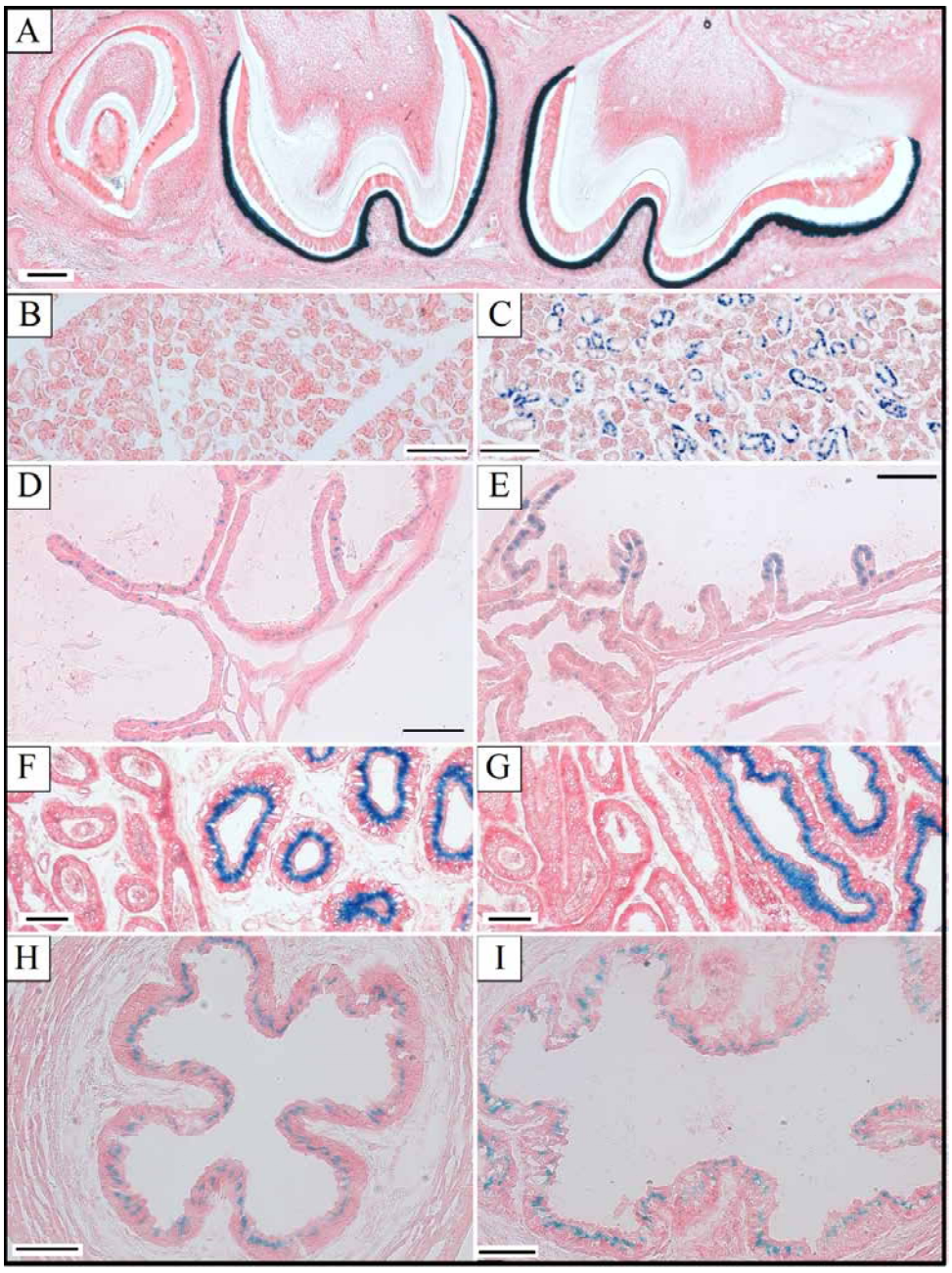
# Expression of kallikrein 4 (Klk4) in dental and non-dental tissues

SIMMER JP, RICHARDSON AS, SMITH CE, HU Y, HU JC-C

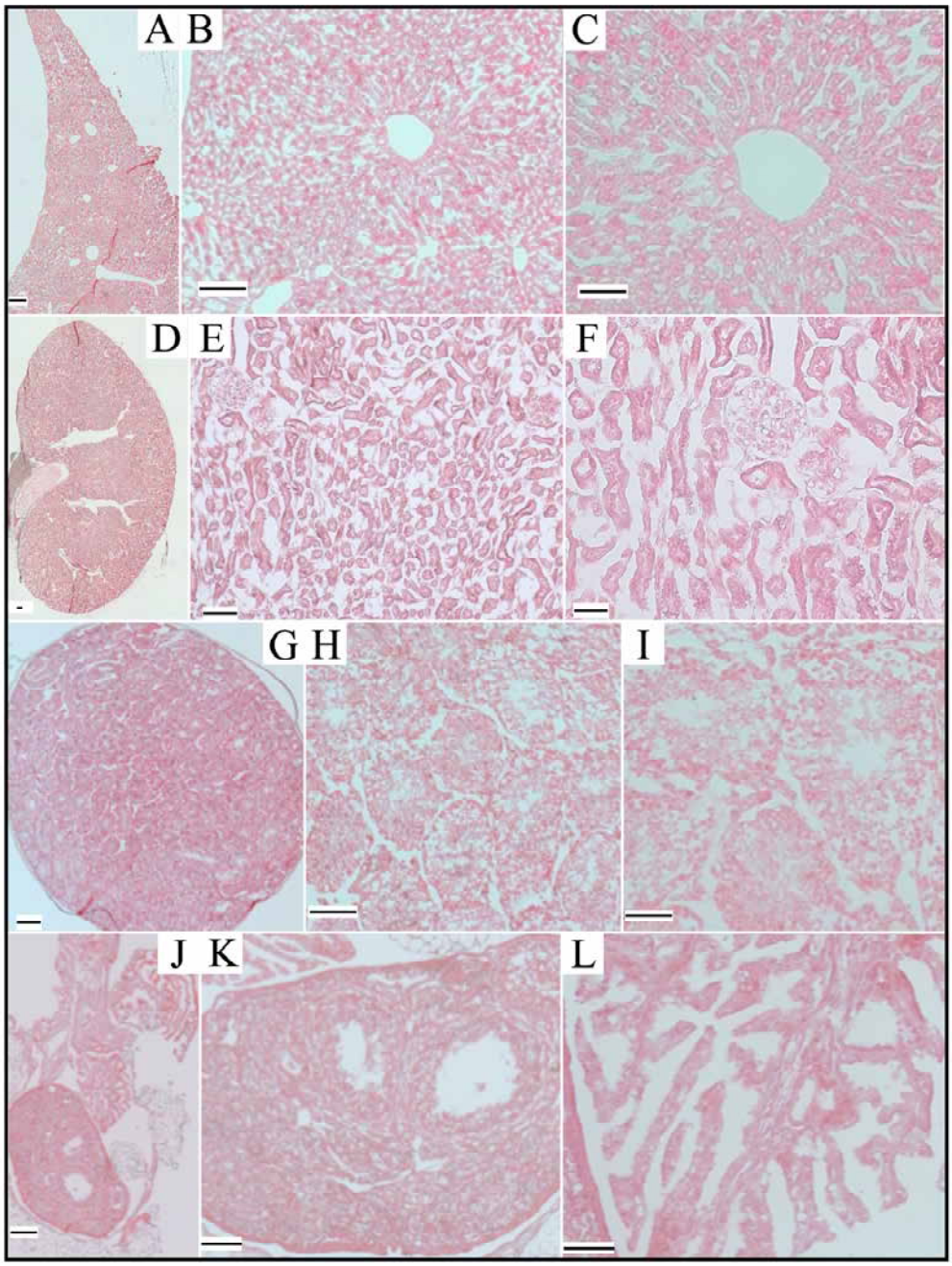
University of Michigan School of Dentistry, Ann Arbor, MI, USA; and
Faculty of Dentistry, McGill University, Montreal, QC, Canada

**Fig. S1**: Overnight *lacZ* histostaining of wild-type and $Klk4^{lacZ/lacZ}$ null mouse tissues.

**Fig. S2**: Lack of Klk4 expression in liver, kidney, testis, ovary, and oviduct with overnight incubation.




**Supporting Fig. 1.** Overnight *lacZ* histostaining of wild-type and *Klk4*$^{lacZ/lacZ}$ null mouse tissues. ***A:*** Day 14 *Klk4*$^{lacZ/lacZ}$ null mouse molars show deep histostaining in ameloblasts with very little background staining in nearby structures. ***B:*** Wild-type submandibular gland shows no background staining. ***C:*** Intralobular ducts in the submandibular gland show positive nuclear staining for Klk4 expression. This was by far the highest expression of Klk4 outside of maturation stage ameloblasts. ***D:*** Wild-type prostate epithelia showed spotty endogenous *lacZ* histostaining. ***E:*** Prostate epithelia showed only islands of relatively weak nuclear staining indicative of Klk4 expression, even with the overnight incubation. ***H-I:*** Epithelia in the head of the epididymis showed strong and equal cytoplasmic staining in both wild-type and *Klk4*$^{lacZ/lacZ}$ null mice, indicative of endogenous (not Klk4 driven) ß-galactosidase activity. ***F-I:*** The wild-type and Klk4$^{lacZ/lacZ}$ null mice showed detectable levels of endogenous (cytoplasmic) ß-galactosidase activity in the vas deferens. Scale bars: A/B/C/F/G, 100 µm; D/E/H/I, 50 µm.




**Supporting Fig. 2.** Lack of Klk4 expression (no nuclear staining) in liver, kidney, testis, ovary, and oviduct with overnight incubation. Wild-type sections for these tissues were negative (data not shown). All panels are from Klk4$^{lacZ/lacZ}$ null mice. ***A-C:*** liver; ***D-F:*** kidney; ***G-I:*** testis: ***J-K:*** ovary; ***L:*** oviduct. Bars on left: 200 μm; middle: 100 μm; right: 50 μm.