Maintenance of the bladder cancer precursor urothelial hyperplasia requires FOXA1 and persistent expression of oncogenic *HRAS*

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Supplemental Data

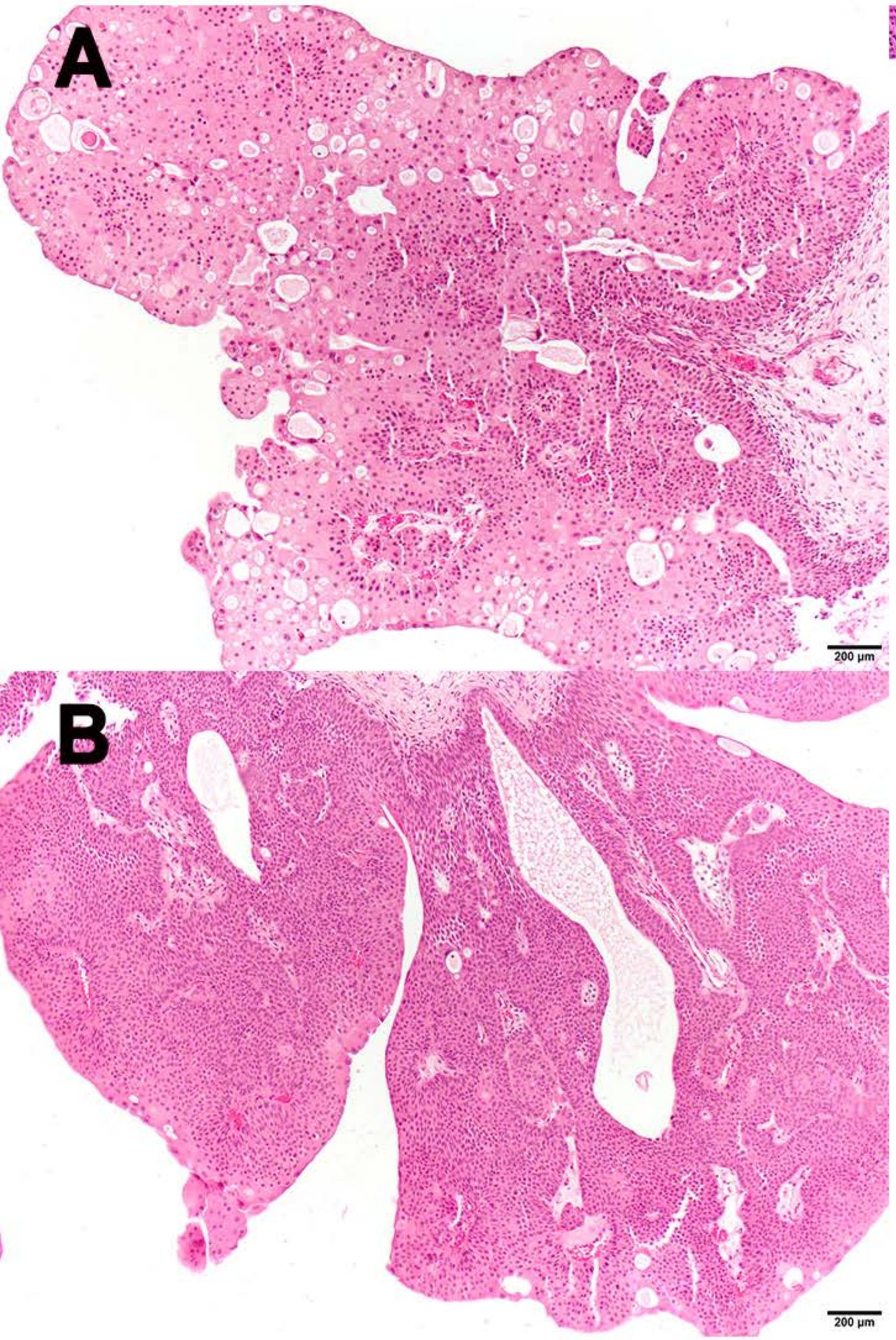
Supplemental Figure 1: Impact of Upk2-Cre induced *Foxa1* KO on urothelial thickness in homozygous HRAS* mice. Bladder tissue dissected from 6 month old mice expressing two copies of mutant HRAS (*Upk2-HRAS***) and (**A**) wild-type *Foxa1* (*Upk2-Cre/Upk2-HRAS***),* (**B**) heterozygous knockout of *Foxa1*(*Upk2-Cre/Upk2-HRAS**/Foxa1^{loxp}*); and (**C**) homozygous knockout of *Foxa1* (*Upk2-Cre/Upk2-HRAS**/Foxa1$^{loxp/loxp}$*). (**D**) Shows quantification of urothelial thickness in control and experimental mice. While urothelium measured in mice expressing two copies of *Upk2-HRAS** alone and in combination with heterozygous knockout of *Foxa1* was significantly thicker than control tissue (p=0.0004 and p=0.02; Kruskal-Wallis H test; Dunn's test for multiple comparisons), homozygous *Foxa1* knockout resulted in urothelium that was not significantly thicker than control mice (P = 0.45; Kruskal-Wallis H test, Dunn's test for multiple comparisons).

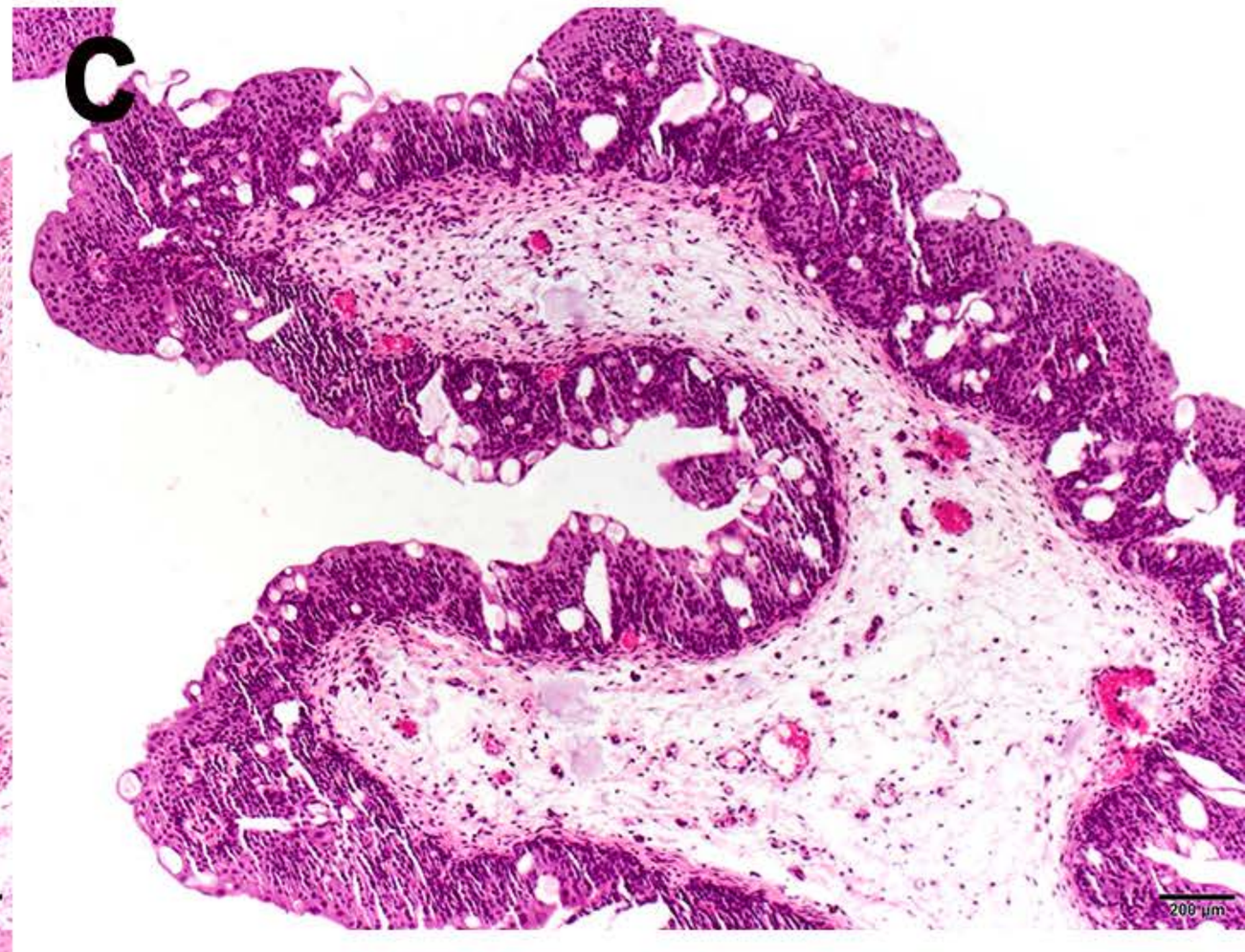
Supplemental Figure 2: Films from HRAS and FOXA1 Western blotting.

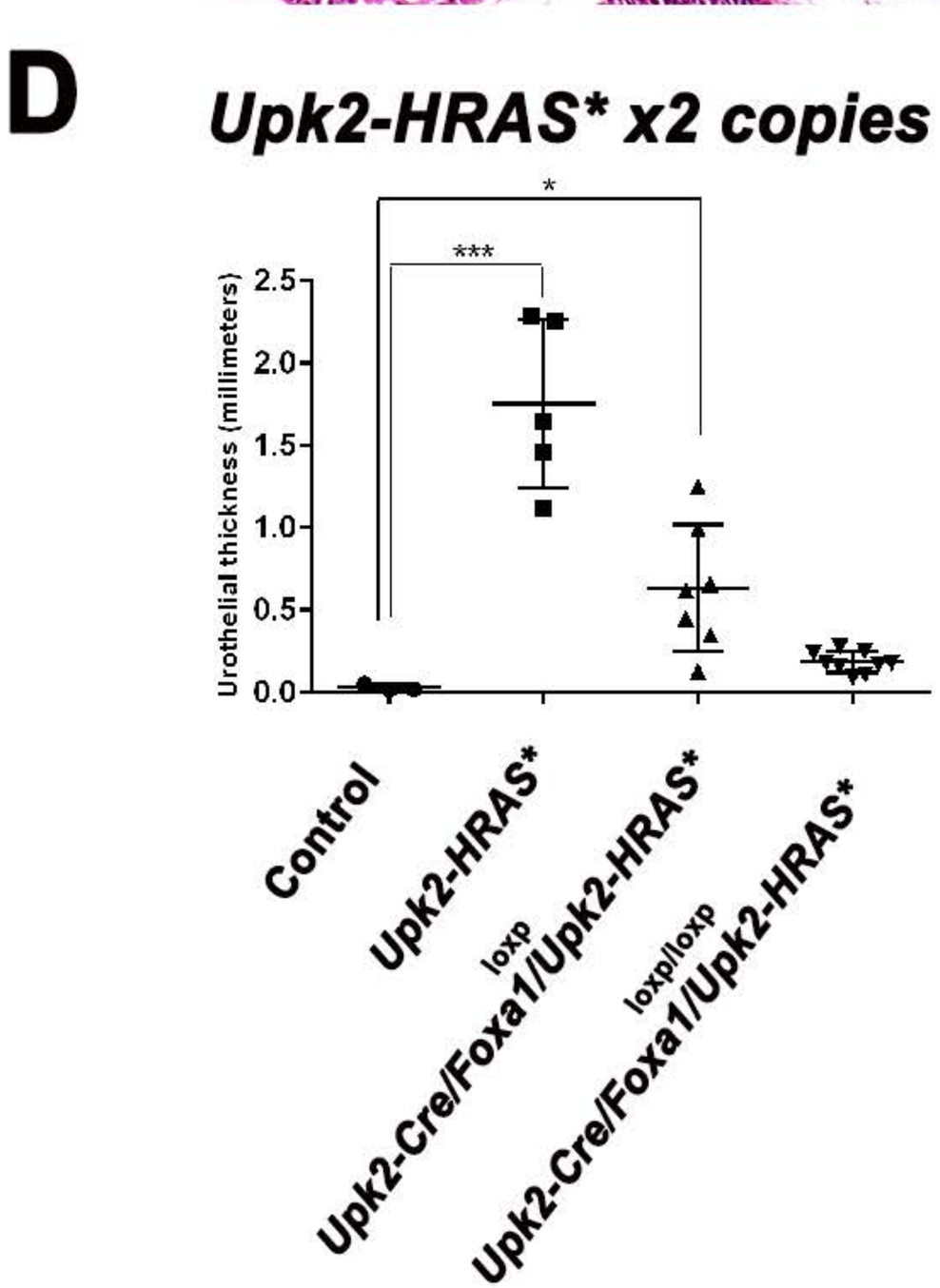
Supplemental Figure 3: Films from Pan Cytokeratin Western blotting.

Supplemental Figure 4: Films from E-Cadherin Western blotting.

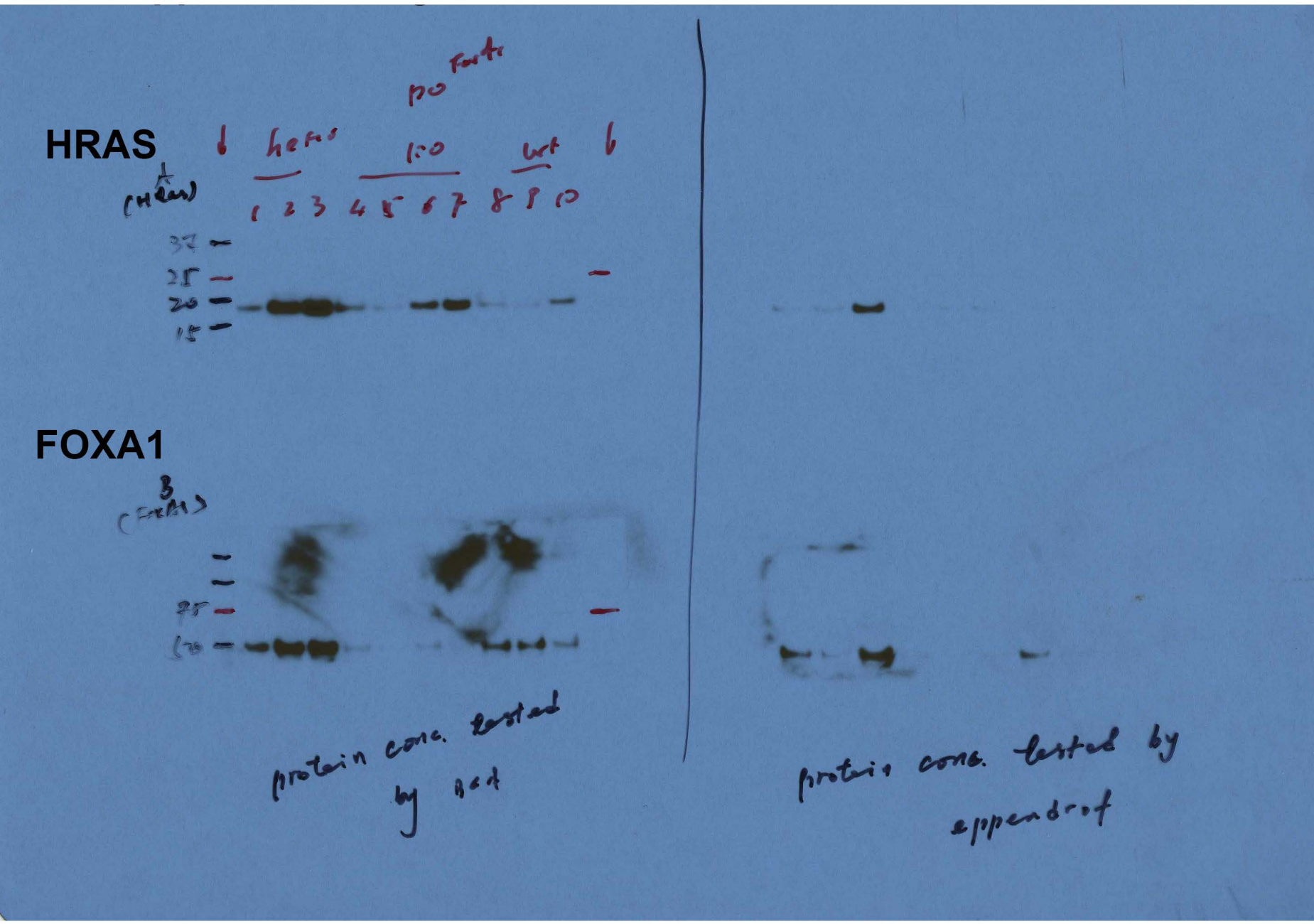
Supplemental Figure 1



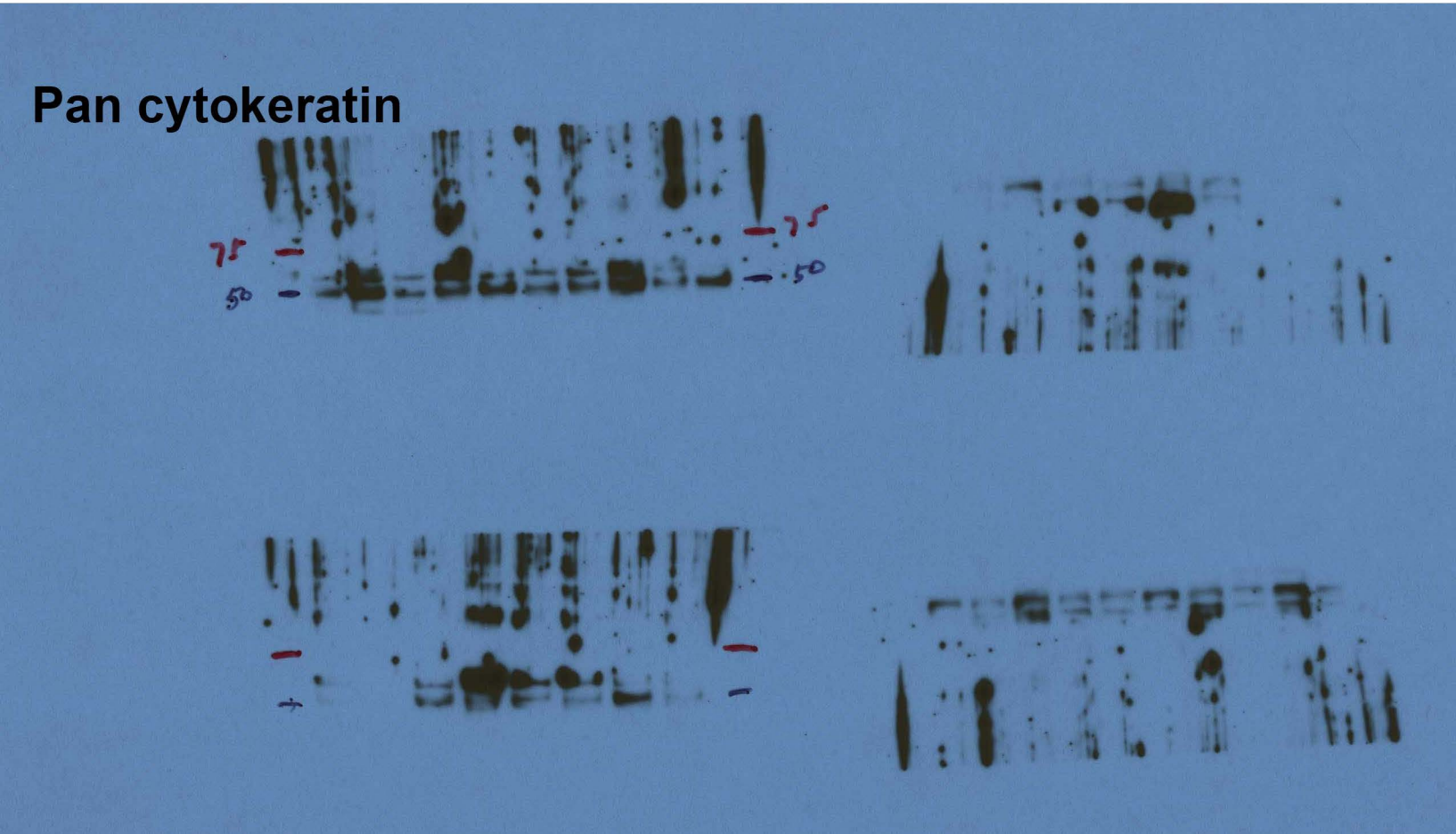




Supplemental Figure 2



Supplemental Figure 3



Supplemental Figure 4