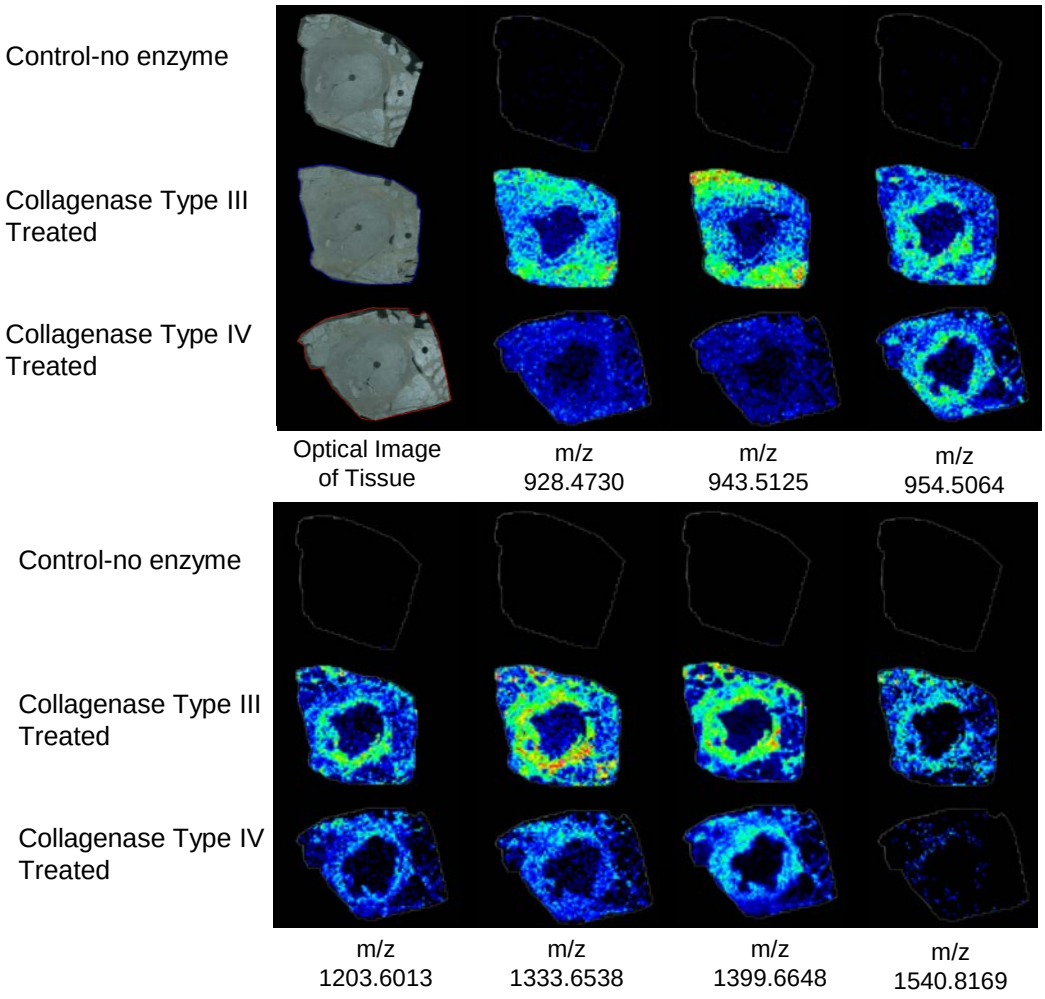
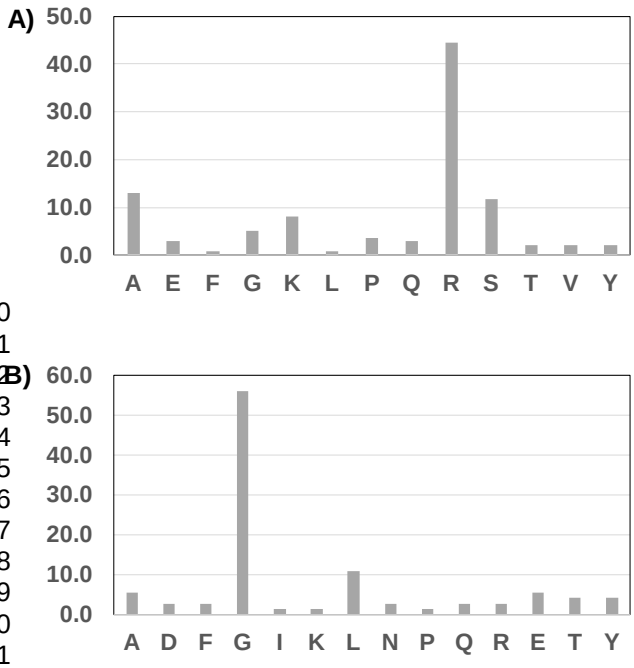
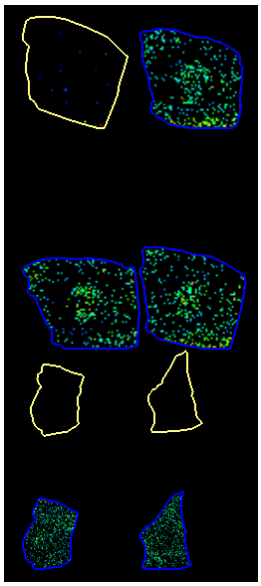


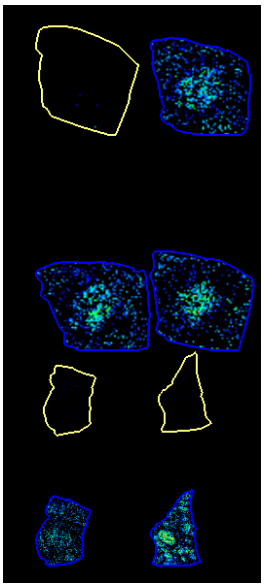
Supplemental Figure 1. Comparison of Collagenase Type III to Collagenase Type IV. Comparison of Collagenase Type III to Collagenase Type IV after optimizing methods for both enzymes illustrated that signal was significantly higher using Collagenase Type III.



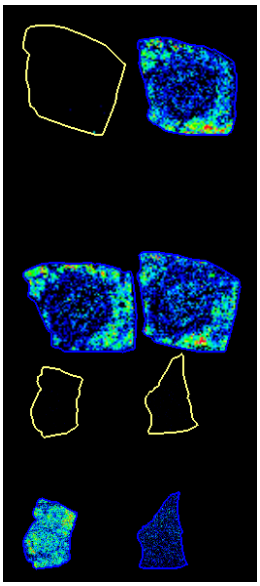
Supplemental Figure 2. Proteomic analysis of label free COLase3 produced peptides from FFPE thin tissue sections, A) Evaluation of C-termini in peptides produced by COLase3; B) Evaluation of amino acids adjacent to C-terminal COLase3 cleavage.



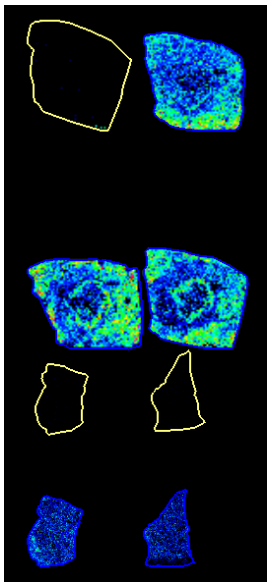
COL1A1
M+H 800.3860 (4.6)
(A)DGQPGAKGA(N)



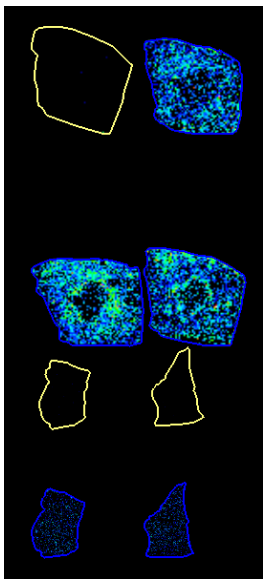
COL1A1
M+H 912.4740 (-2.2)
(A)PGQMGPRGL(P)



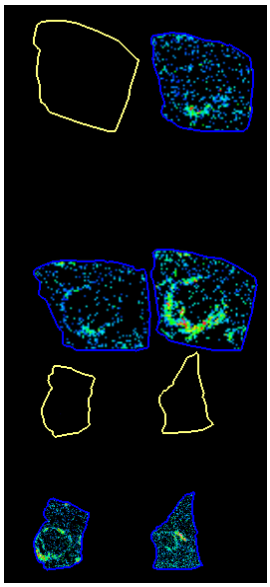
COL1A1
M+H 948.4010 (-6.9)
(L)SYGYDEKS(T)



COL3A1
M+H 875.3950 (-2.6)
(V)DPNQGCKL(D)
deamid



COL3A1
M+H 1080.5250 (0.5)
(L)AGPPGMPGPRG
S(P)



COL3A1
M+H 1343.6940 (1.6)
(S)RKNPARNCRDL(
K) deamid

Supplemental Figure 3. Variation in patterns of target collagens by peptide mass fingerprinting across 5 tissues of liver. Yellow marks control, treated identically but without enzyme application. Variations were minimal and these image represent the most extreme cases. It is possible that 1) peptides were isobaric with other proteins or 2) processes of collagen synthesis and post translational modification cause variation in detection of certain portions of the collagen expression.