

Supporting Information

Non-Collagenous Dentin Proteins Binding Sites Controls Mineral Formation during the Biomineralisation Process in Radicular Dentin

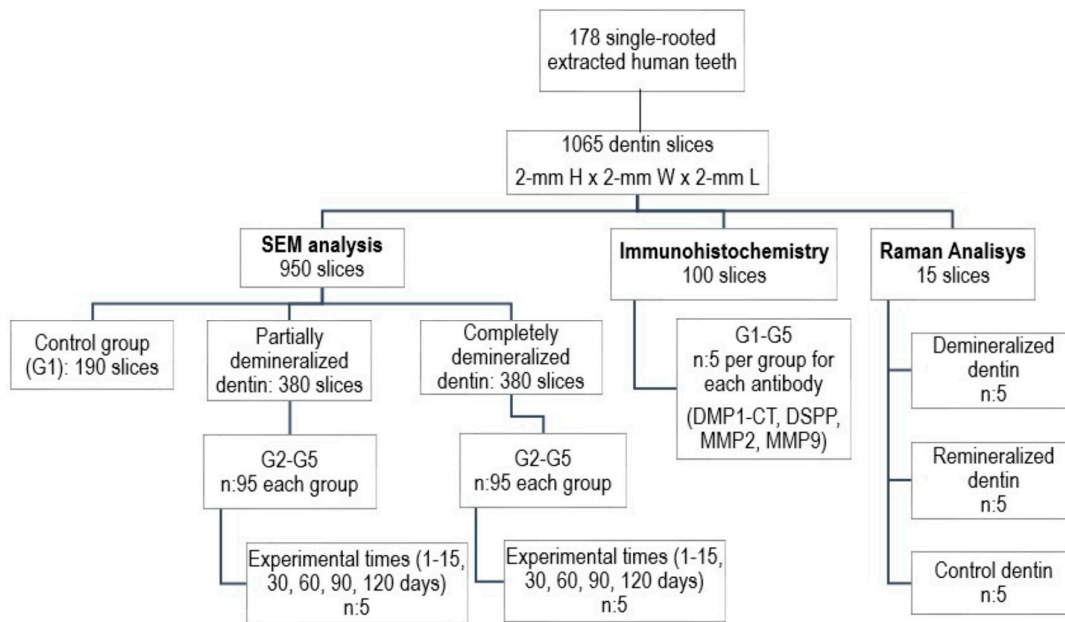
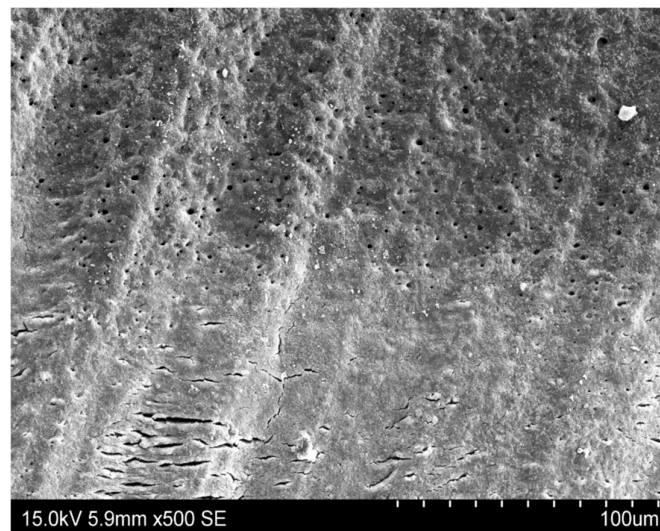
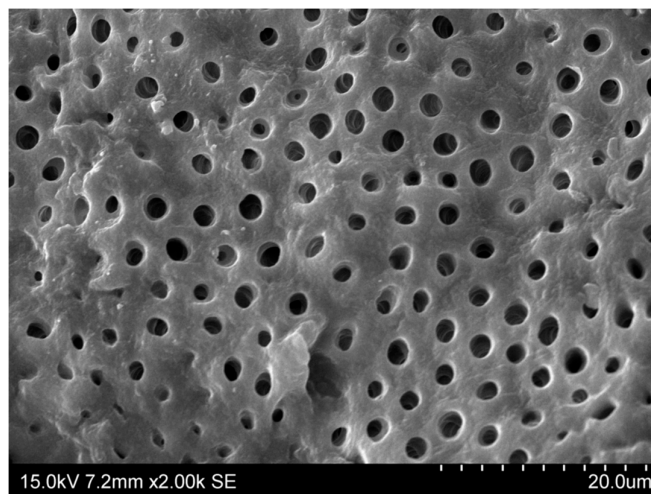


Figure S1. Flowchart of study sample selection.



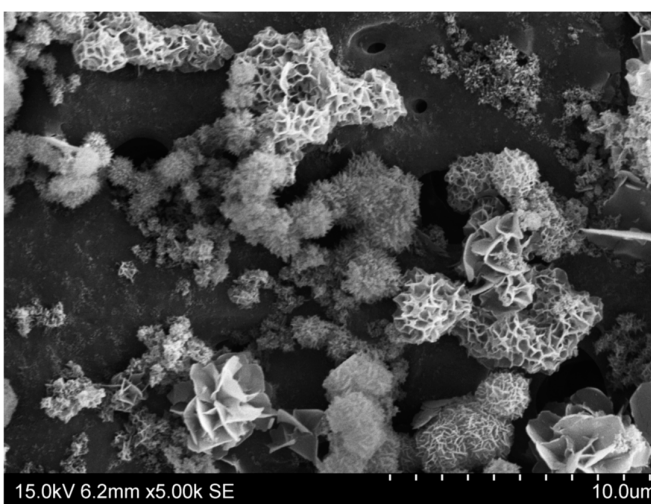
(A)



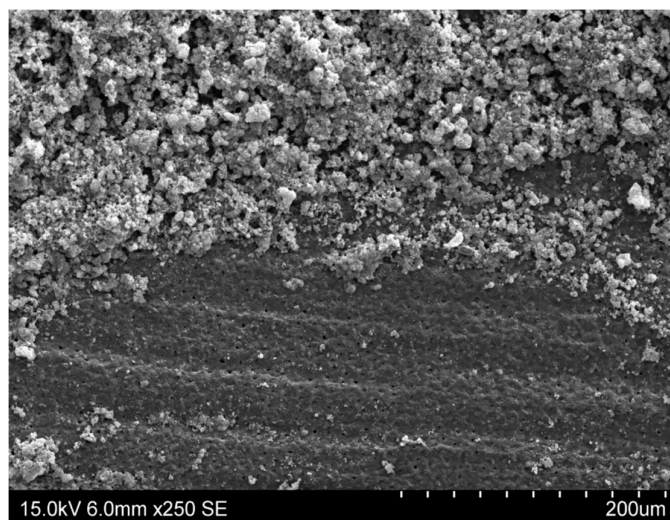
(B)



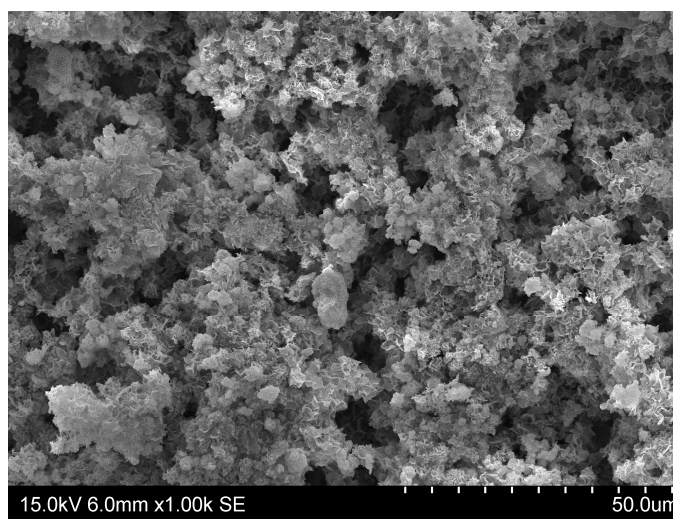
(C)



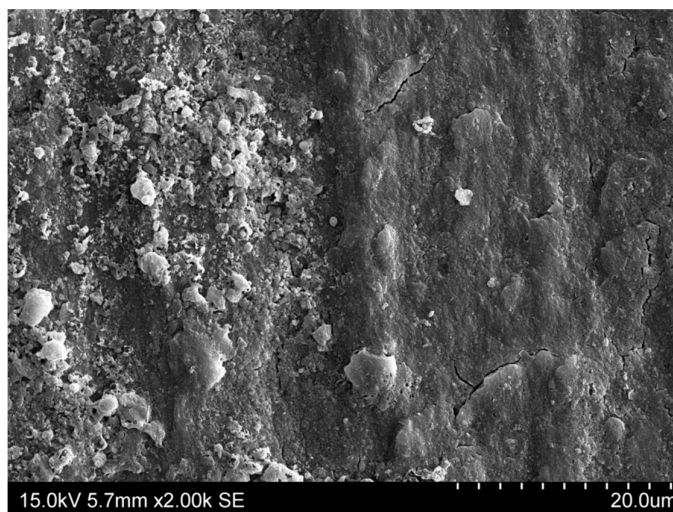
(D)



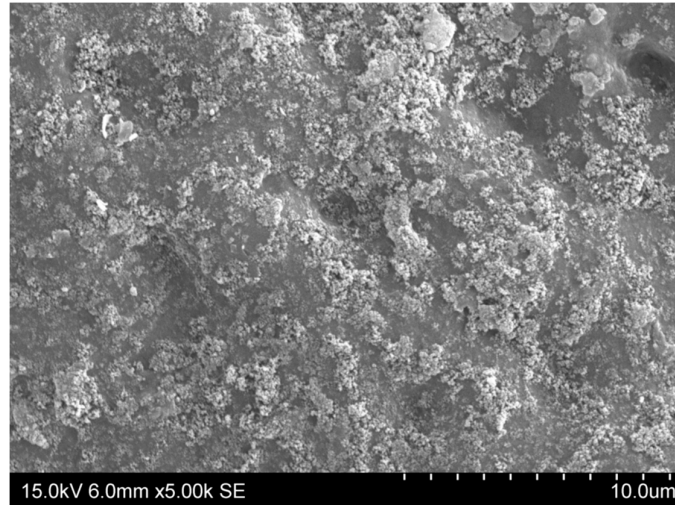
(E)



(F)

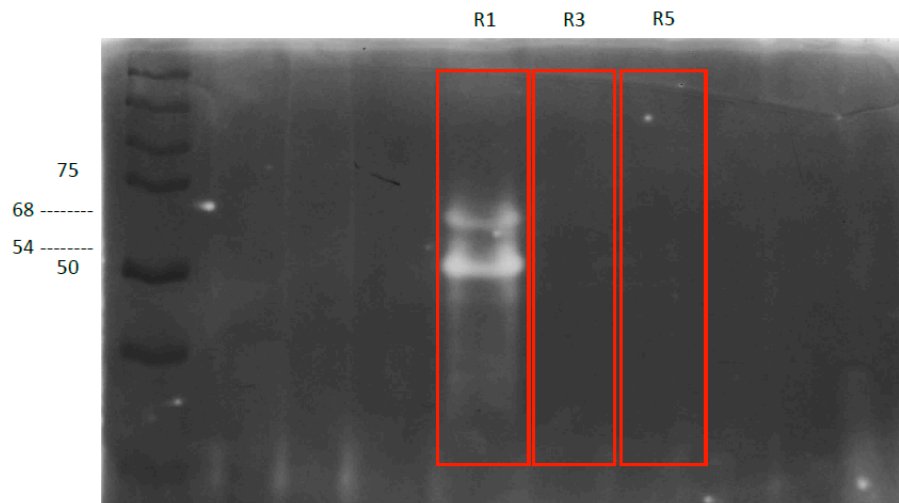


(G)

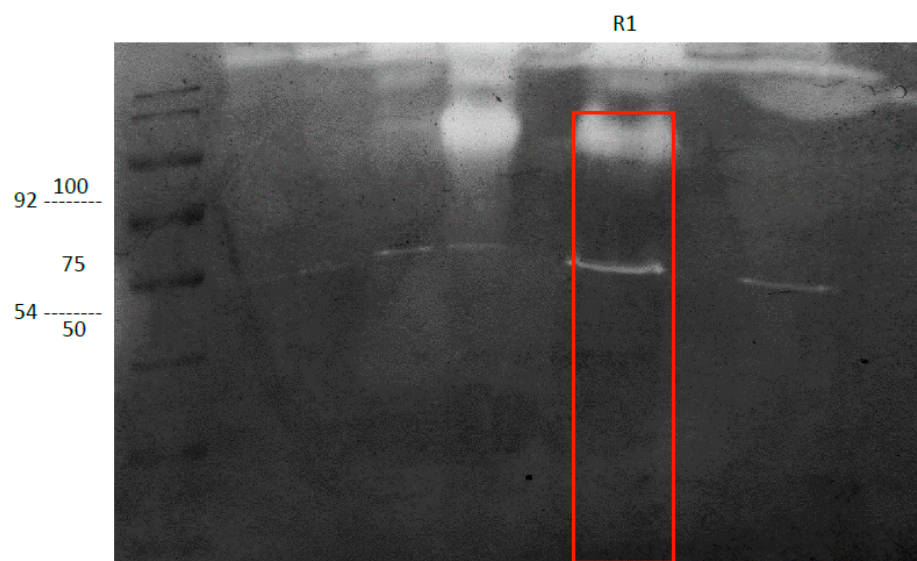


(H)

Figure S2. Uncropped photomicrographs showing the partially demineralised dentin as a template for remineralisation from Figure 3. To improve clarity and allow visual comparison in Figure 3, intact photomicrographs were cropped and rotated, showing control dentin at the left-hand side. Intact photomicrographs of (A) partially demineralised dentin (500×) and (B) permeable tubules (2000×); (C) precipitate formation exclusively over the demineralised dentin surface (500×) and (D) inside the intratubular dentin area (5000×); E(250×), F (2000×) thickening of the mineralised layer exclusively over the demineralized dentin at day 60; and G (2000X), H (5000×) remineralisation of radicular dentin was observed (4 months).



(A)

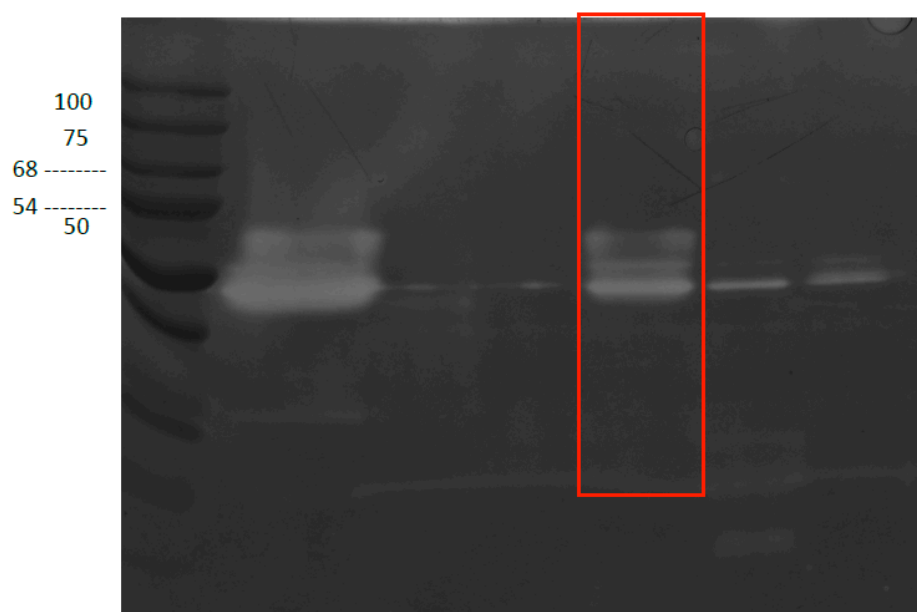


(B)

R1

R3

R2



(C)

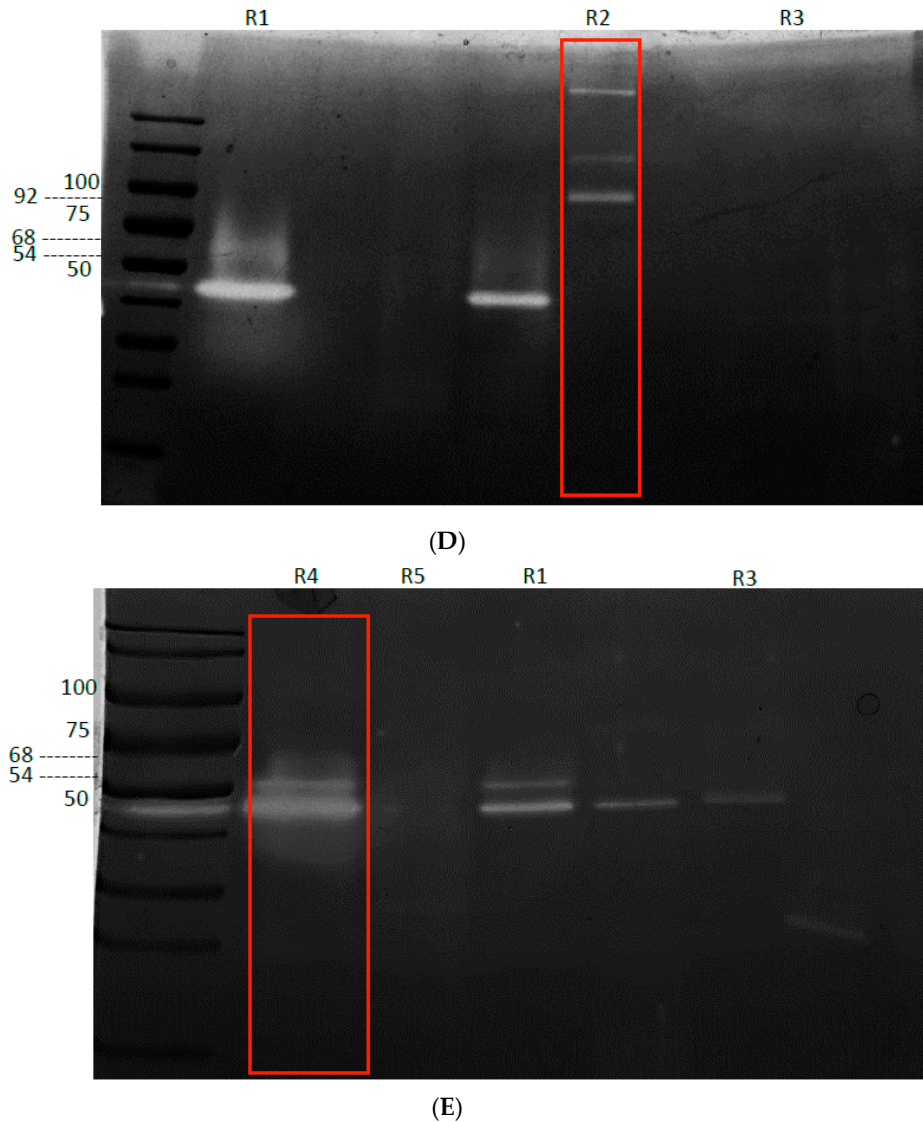


Figure S3. Uncropped zymograms showing the presence of MMP-2, MMP-9 and MMP-20 from Figure 4A. Different zymography gels were used to show the presence of representative gelatinolytic bands at 54 kDa (MMP-20), 68 kDa (MMP-2), and 92 kDa (MMP-9). To improve the clarity and conciseness of the Figure 4A intact zymograms from A–E were edited (brightness and contrast), cropped, rearranged and assembled. The rectangle marks the representative bands. **A:** Zymogram depicted in Figure 4A (Lane 1,5,7) show Control dentin (R1) as positive control, Demineralised dentin inhibited with chlorhexidine (R3) and Remineralised dentin inhibited with chlorhexidine (R5), both as negative controls. **B:** Zymogram depicted in Figure 4A (Lane 2) shows Control dentin (R1) at different dilutions of the sample in the uncropped gel. **C and D:** Zymograms depicted in Figure 4A (Lanes 3 and 4) show Demineralised dentin (R2) and positive and negative controls (R1 and R3). **E:** Zymogram depicted in Figure 4A (Lane 6), shows remineralised dentin (R4), positive (R1) and negative controls (R3 and R5).



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