

Supplemental Data Part 3

Histological Assessment of *Fam83h*^{Tr/Tr}, *Fam83h*^{+Tr}, & *Fam83h*^{+/+}
 Mouse Maxillary and Mandibular Incisor Longitudinal Sections.

Part 3a: Maxillary Incisor Longitudinal Sections

- Fig. S28.** Histology of *Fam83h*^{Tr/Tr} Maxillary Incisor at 7-weeks (F11).
Fig. S29. Histology of *Fam83h*^{Tr/+} Maxillary Incisor at 7-weeks (F04).
Fig. S30. Histology of *Fam83h*^{+/+} Maxillary Incisor at 7-weeks (WT17).

Part 3b: *Fam83h*^{Tr/Tr} Incisor Longitudinal Sections

- Fig. S31.** Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F08B1).
Fig. S32. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F08B2).
Fig. S33. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F09B1).
Fig. S34. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F09B2).
Fig. S35. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F10B1).
Fig. S36. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F10B2).
Fig. S37. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F06B1).
Fig. S38. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F06B2).
Fig. S39. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F07B1).
Fig. S40. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F07B2).

Part 3c: *Fam83h*^{Tr/+} Incisor Longitudinal Sections

- Fig. S41.** Histology of *Fam83h*^{+Tr} Mandibular Incisor at 7-weeks (F03B1).
Fig. S42. Histology of *Fam83h*^{+Tr} Mandibular Incisor at 7-weeks (F03B2).
Fig. S43. Histology of *Fam83h*^{+Tr} Mandibular Incisor at 7-weeks (F04B1).
Fig. S44. Histology of *Fam83h*^{+Tr} Mandibular Incisor at 7-weeks (F04B2).

Part 3d: *Fam83h*^{+/+} Incisor Longitudinal Sections

- Fig. S45.** Histology of *Fam83h*^{+/+} Mandibular Incisor at 7-weeks (WT17B1).
Fig. S46. Histology of *Fam83h*^{+/+} Mandibular Incisor at 7-weeks (WT17B2).
Fig. S47. Histology of *Fam83h*^{+/+} Mandibular Incisor at 7-weeks (WT18B1).
Fig. S48. Histology of *Fam83h*^{+/+} Mandibular Incisor at 7-weeks (WT18B2).

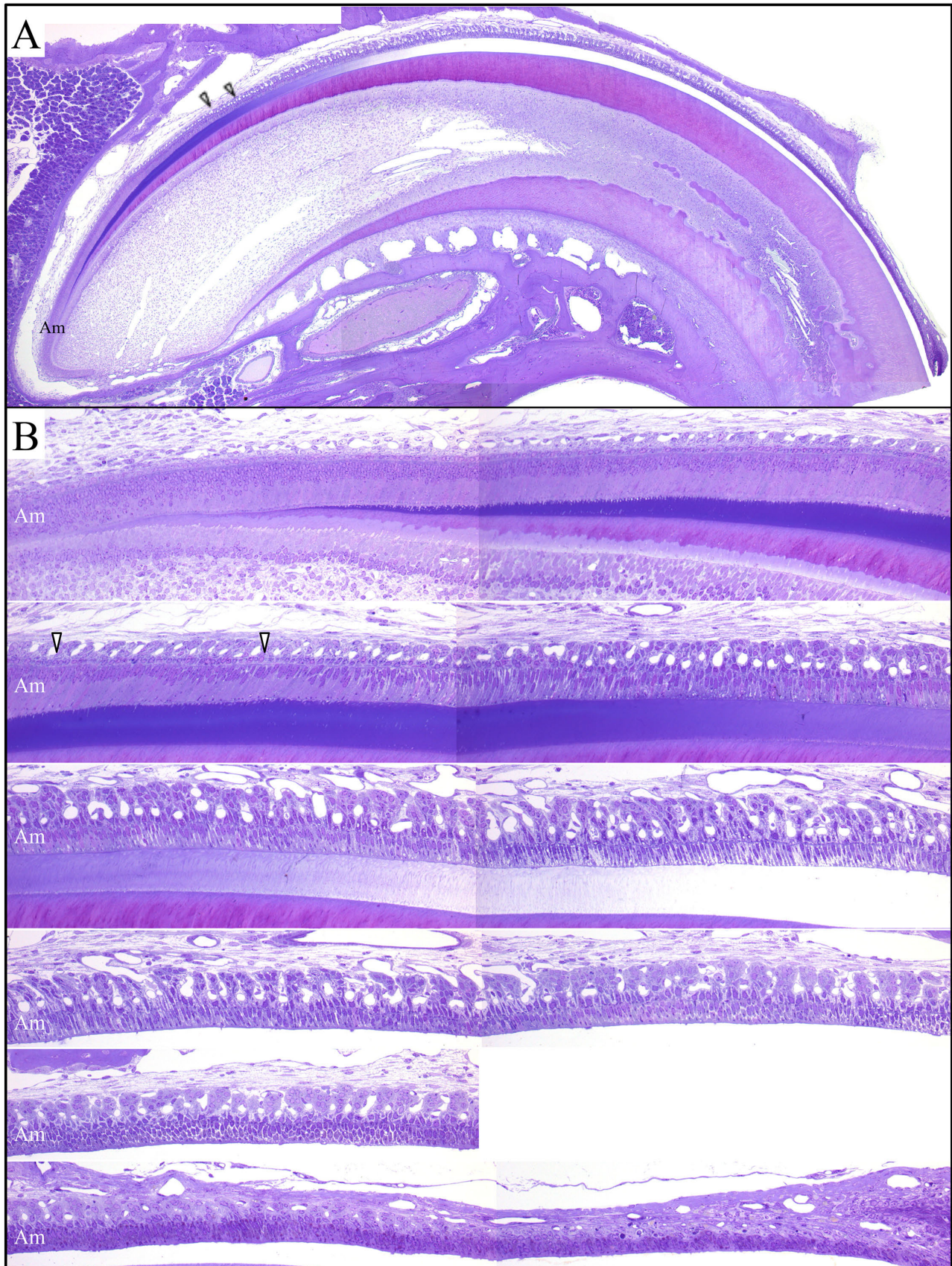


Fig. S28. Histology of *Fam83h^{Tr/Tr}* Maxillary Incisor at 7-weeks (F11). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis; Am, Ameloblasts.

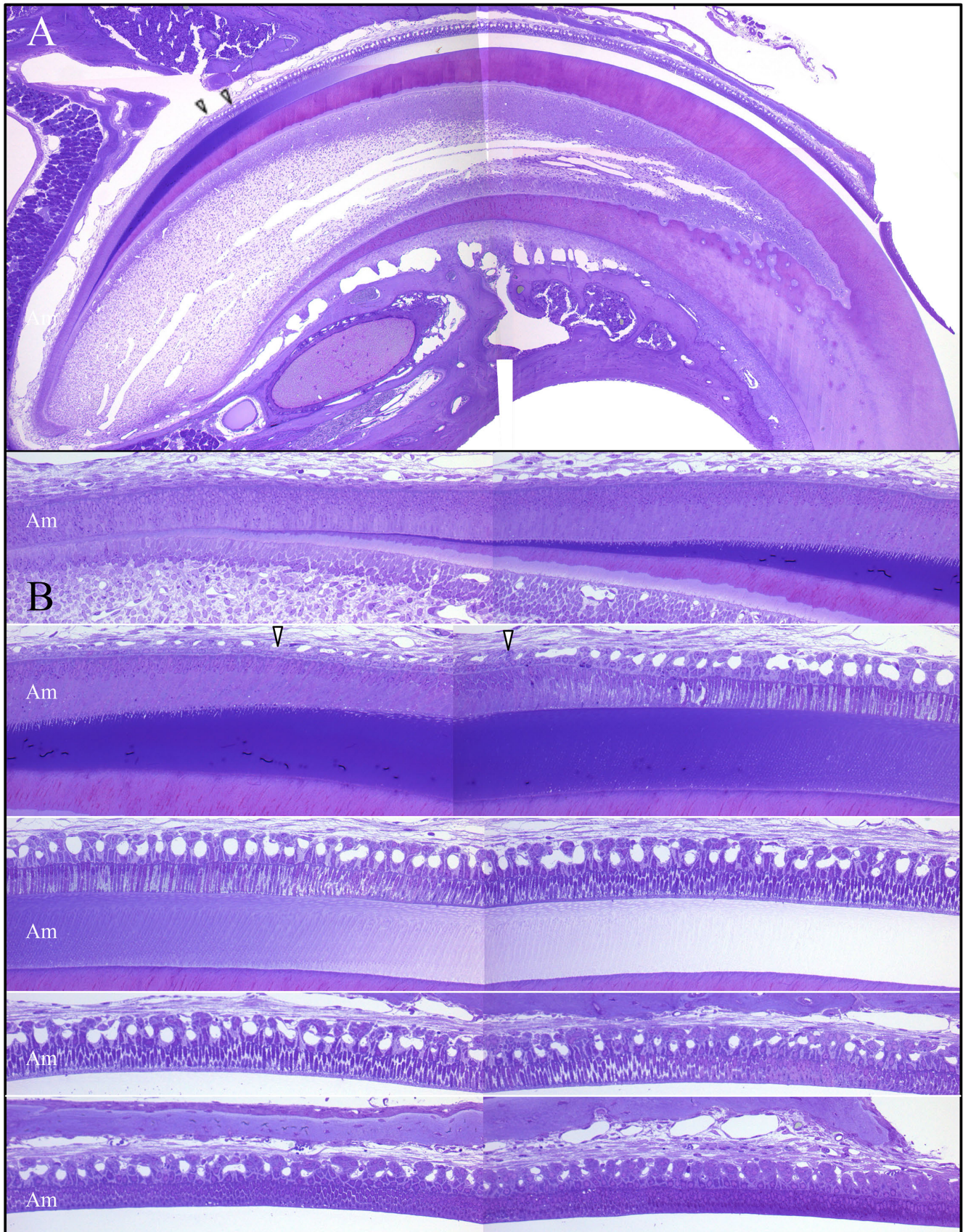


Fig. S29. Histology of *Fam83h*^{+Tr} Maxillary Incisor at 7-weeks F04. **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts.

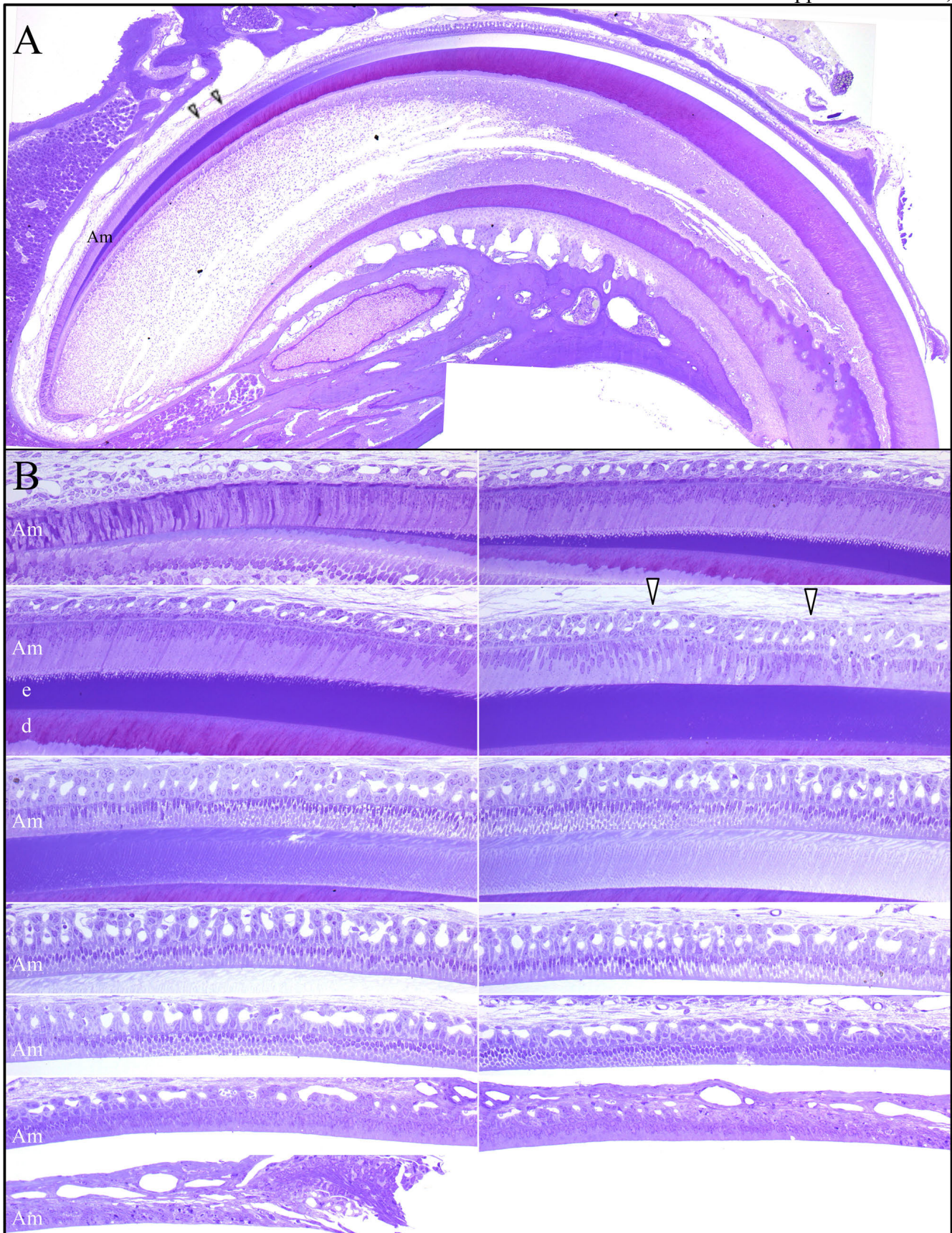


Fig. S30. Histology of *Fam83h*^{+/+} Maxillary Incisor at 7-weeks (WT 17) **A:** Low magnification composite image. **B:** High magnification images of the maxillary incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts; d, dentin; e, enamel.

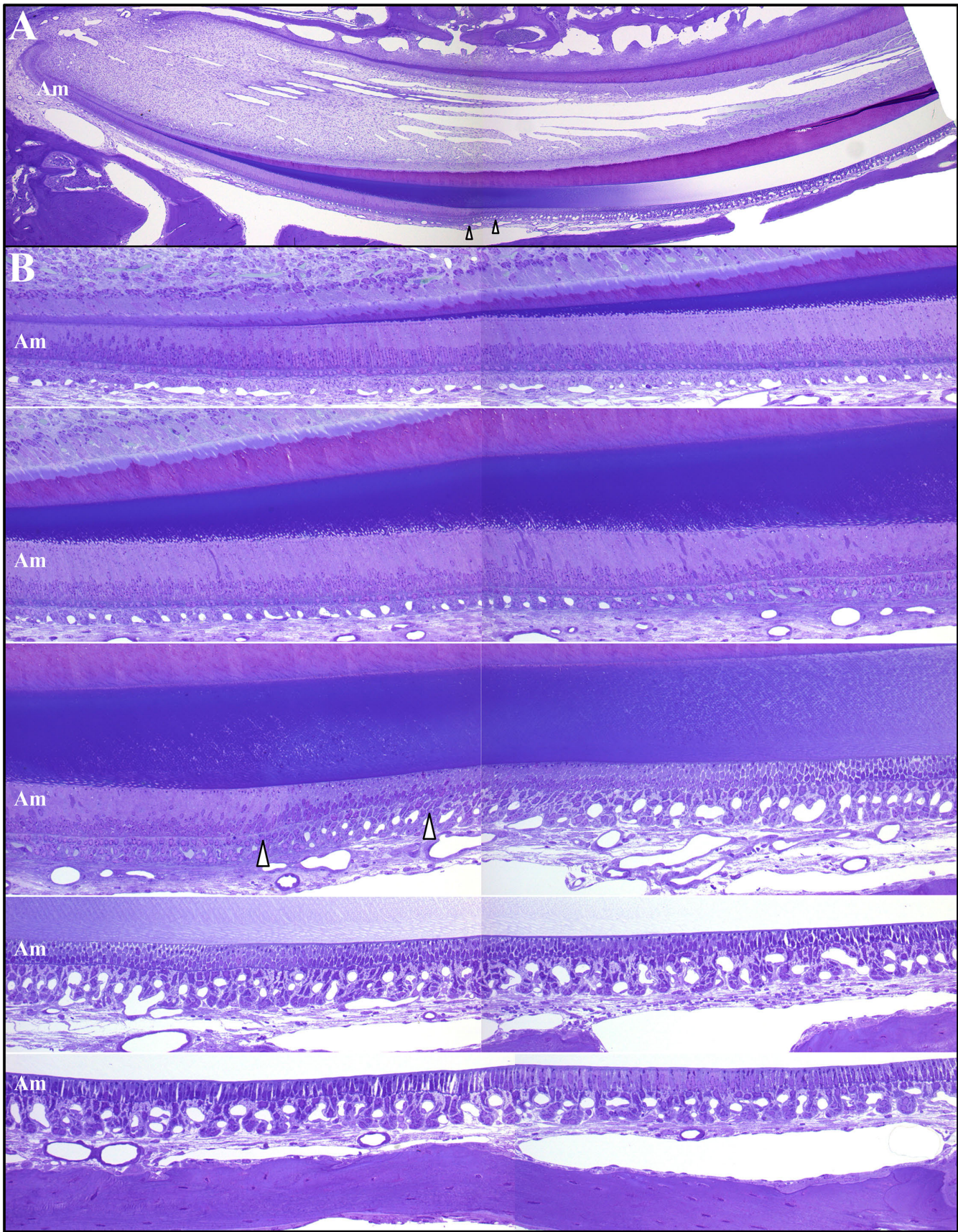


Fig. S31. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F08 Block 1). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts; d, dentin; e, enamel.

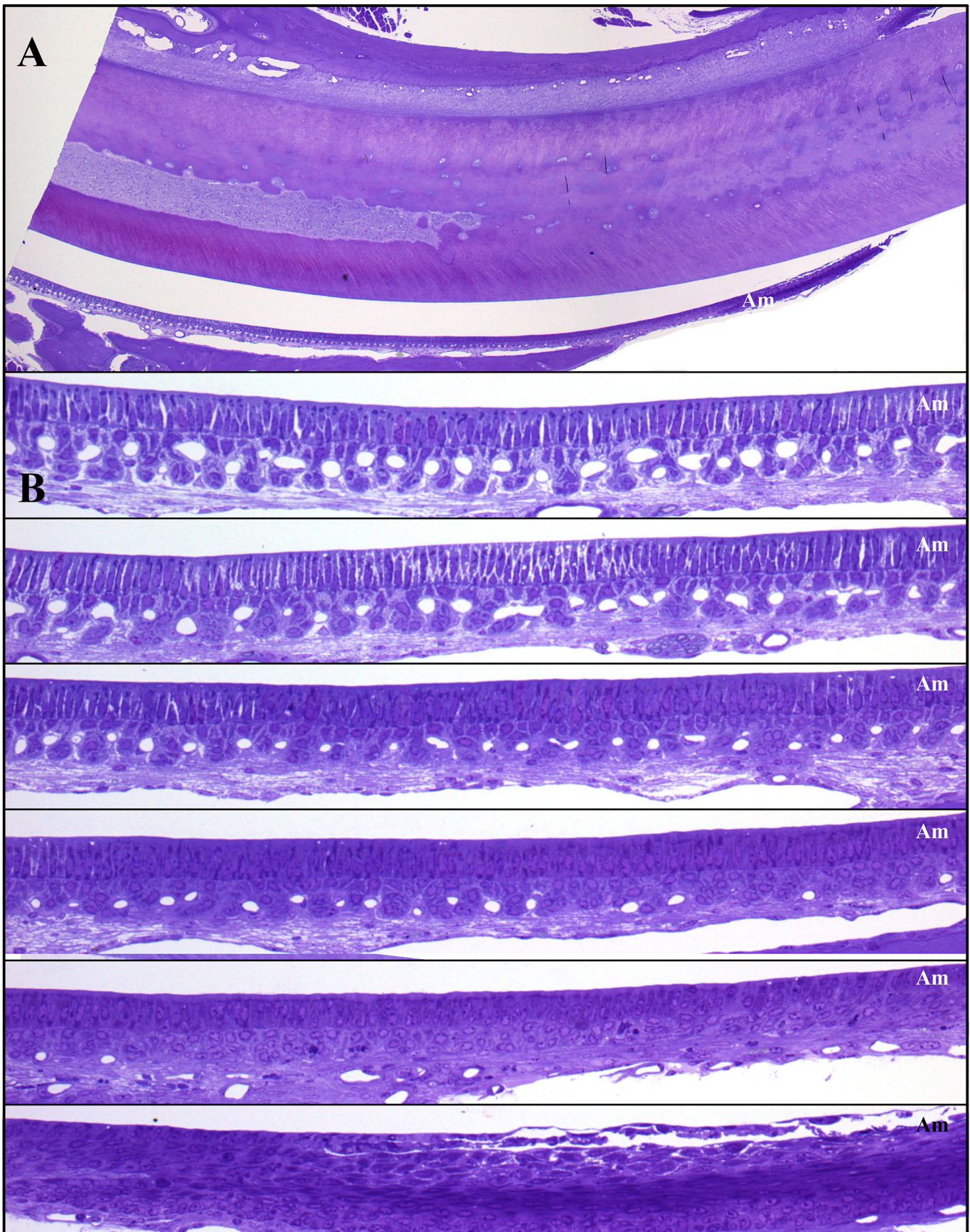


Fig. S32. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F08B2). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** Am, Ameloblasts.

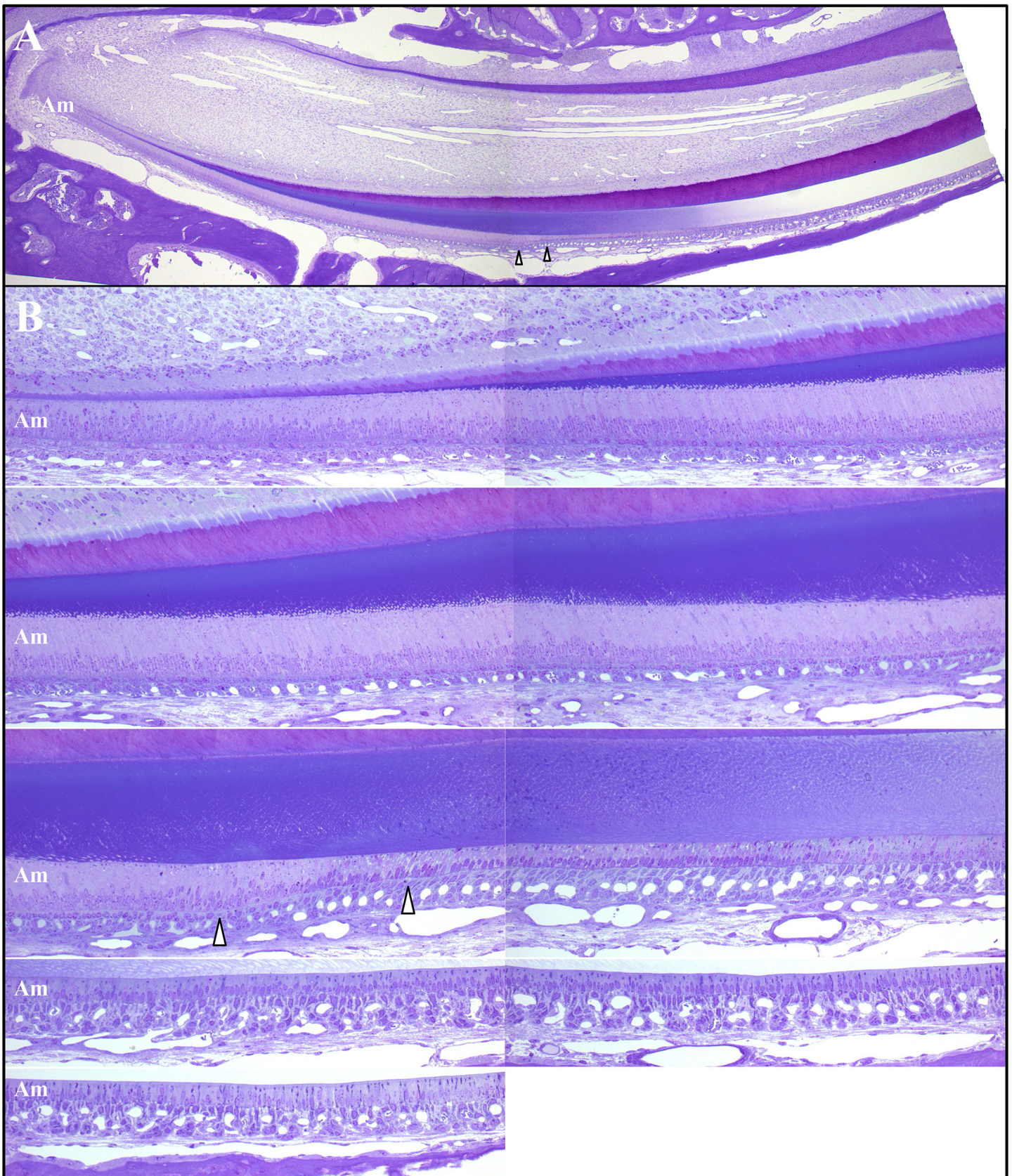


Fig. S33. Histology of *Fam83h^{Tr/Tr}* Mandibular Incisor at 7-weeks (F09B1). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts.

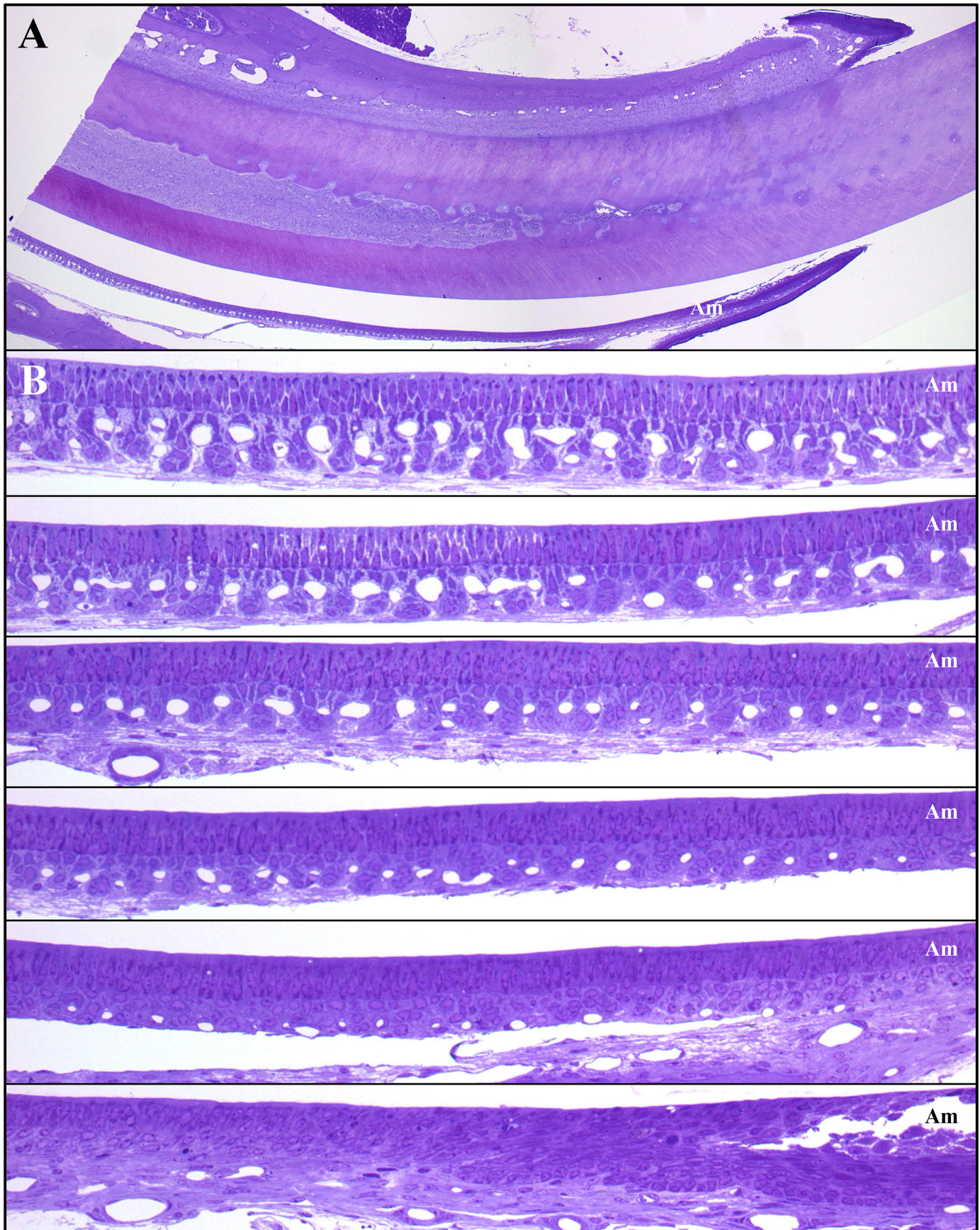


Fig. S34. Histology of *Fam83^{Tr/Tr}* Mandibular Incisor at 7-weeks (F09B2). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** Am, Ameloblasts.

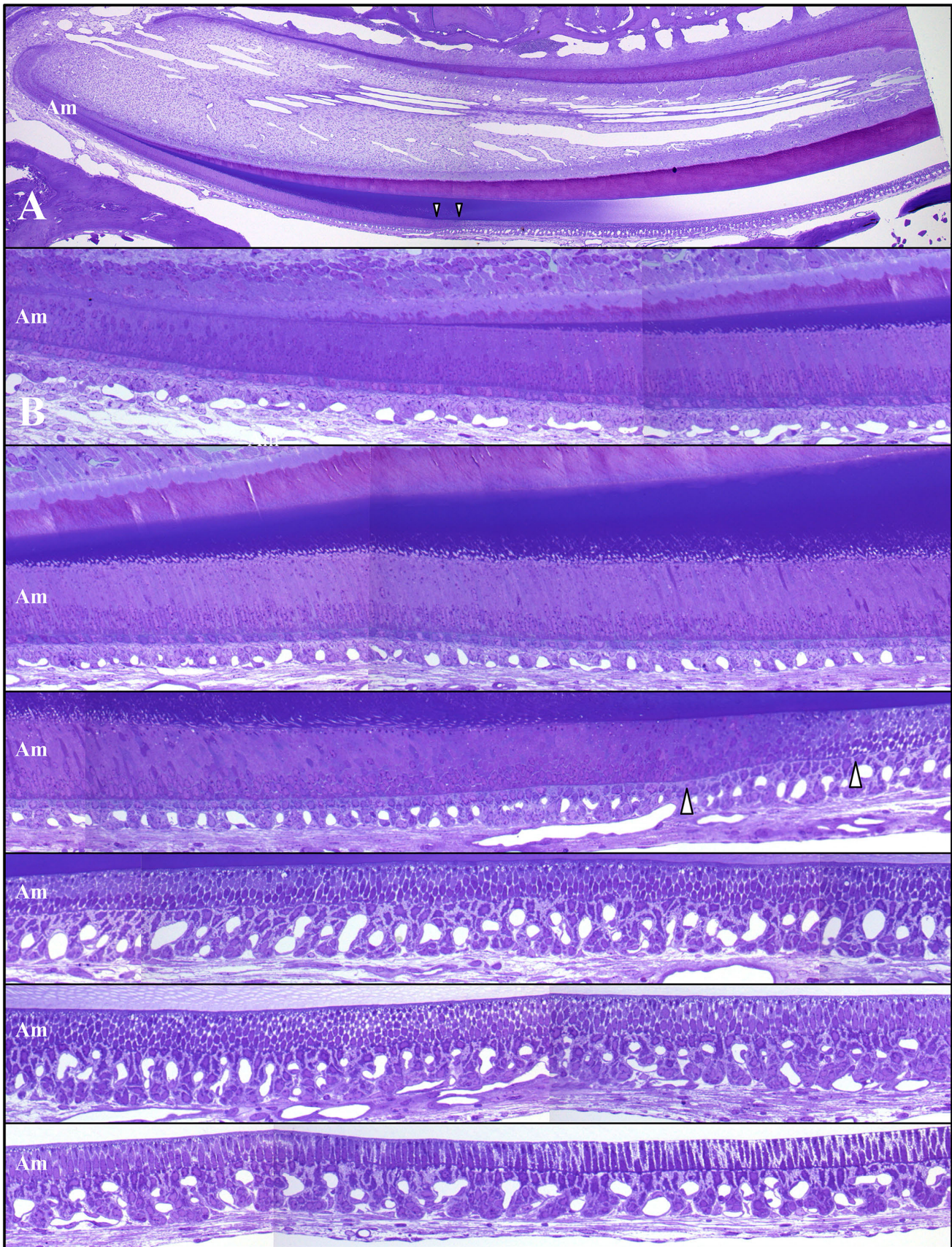


Fig. S35. Histology of *Fam83h^{Tr/Tr}* Mandibular Incisor at 7-weeks (F10B1). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts.

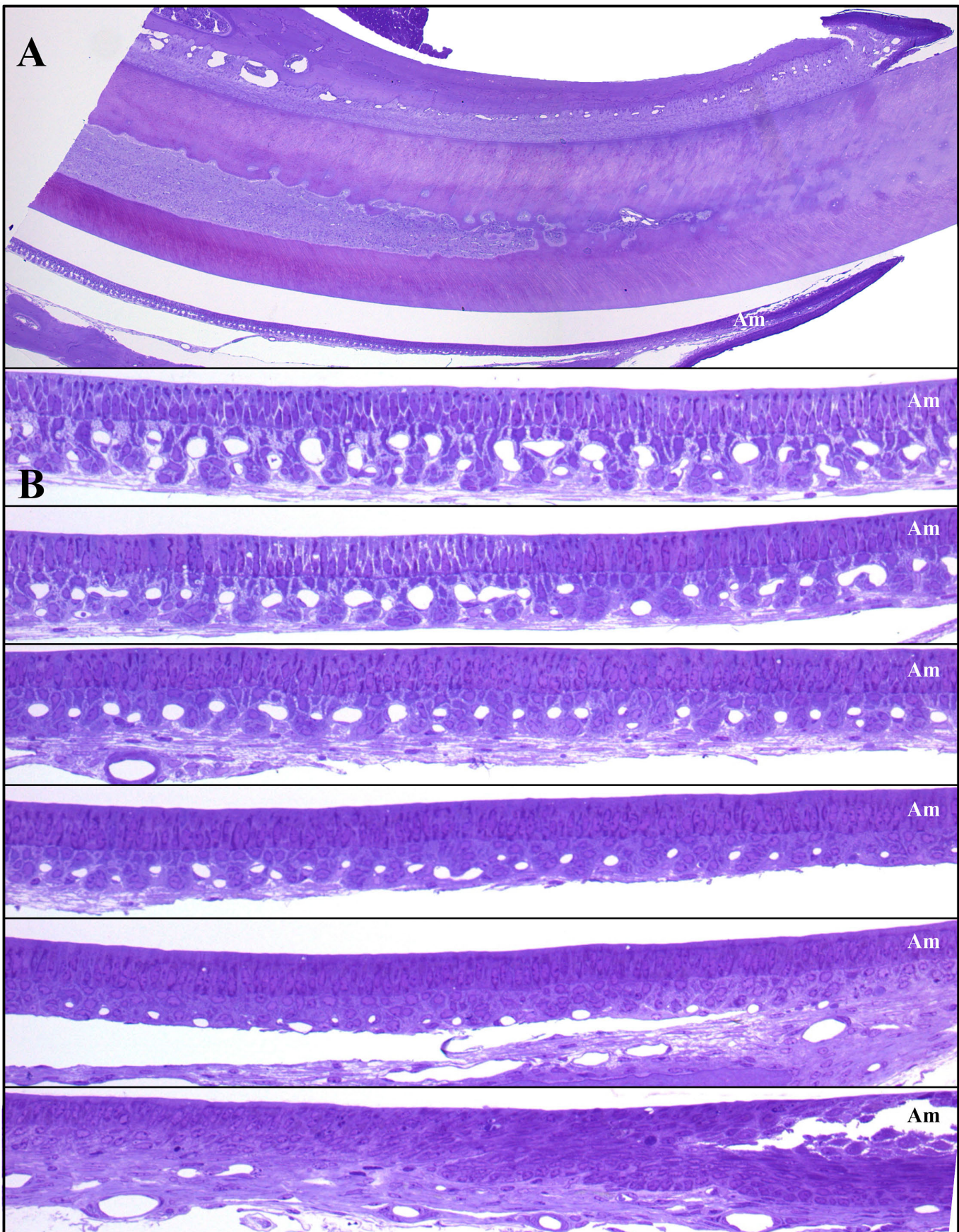


Fig. S36. Histology of *Fam83h^{Tr/Tr}* Mandibular Incisor at 7-weeks (F10B2). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** Am, Ameloblasts.

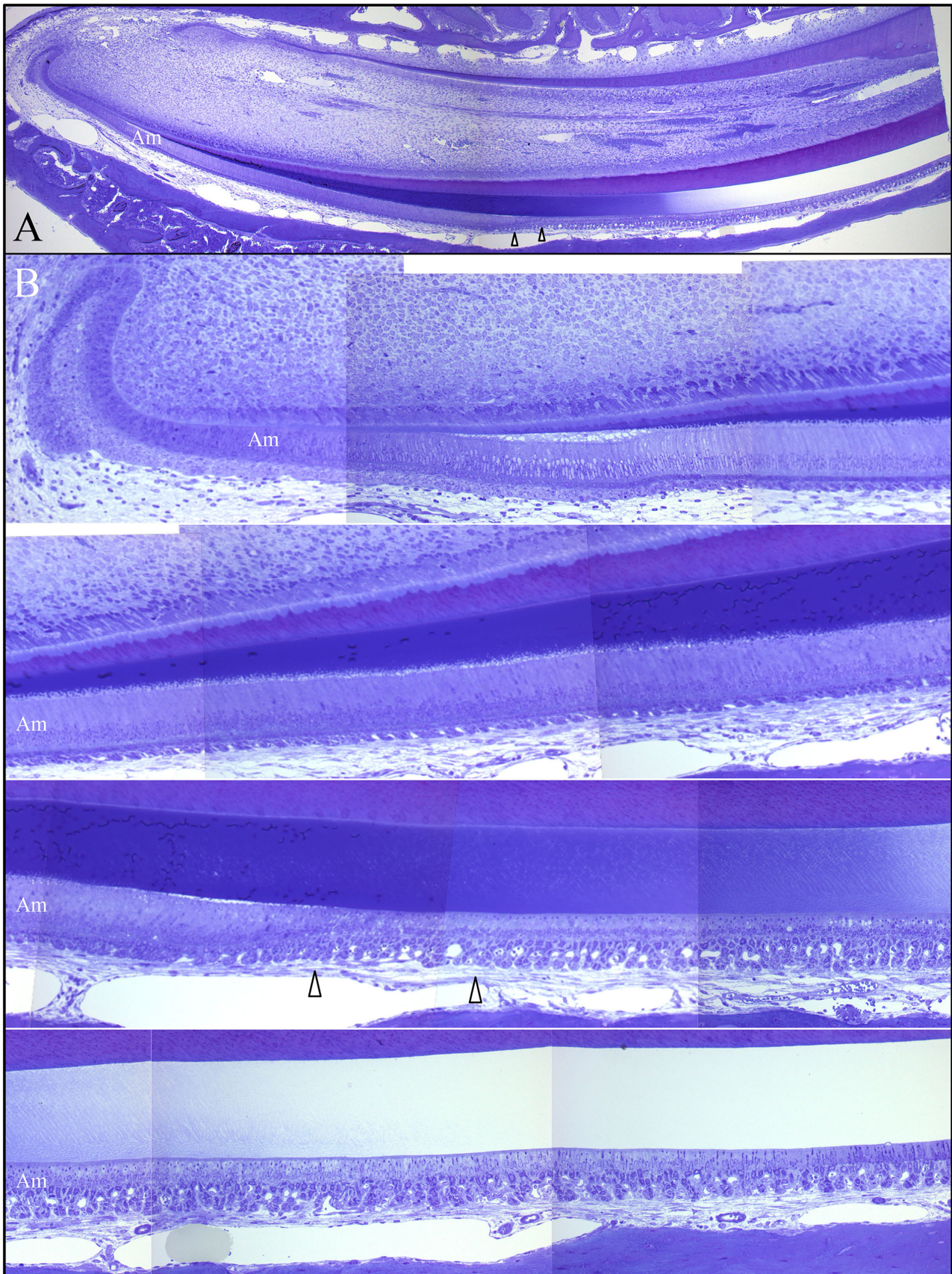


Fig. S37. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F06 Block 1). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts.

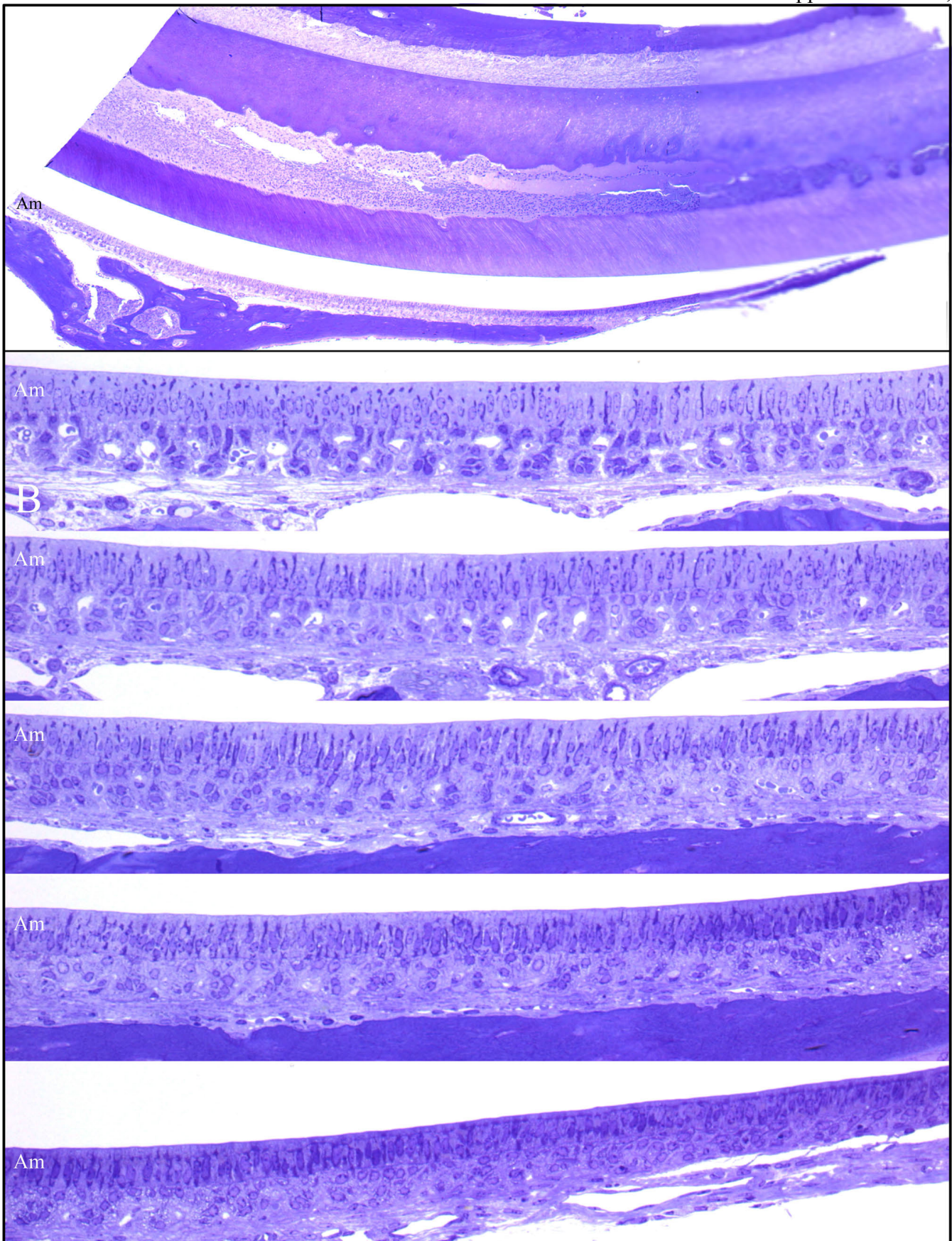


Fig. S38. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F06 Block 2). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** Am, Ameloblasts.

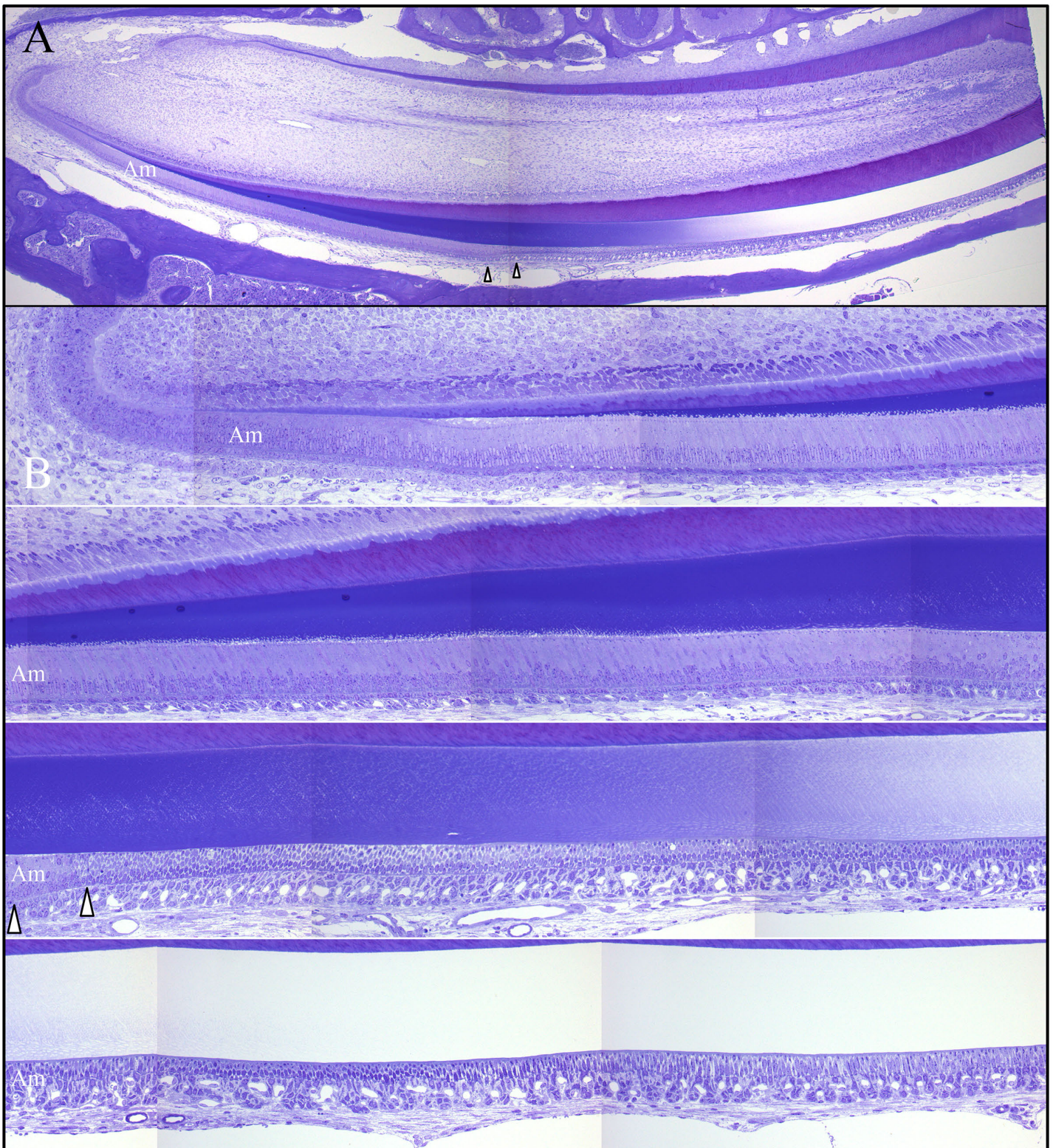


Fig. S39. Histology of *Fam83h*^{Tr/Tr} Mandibular Incisor at 7-weeks (F07 Block 1). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts.

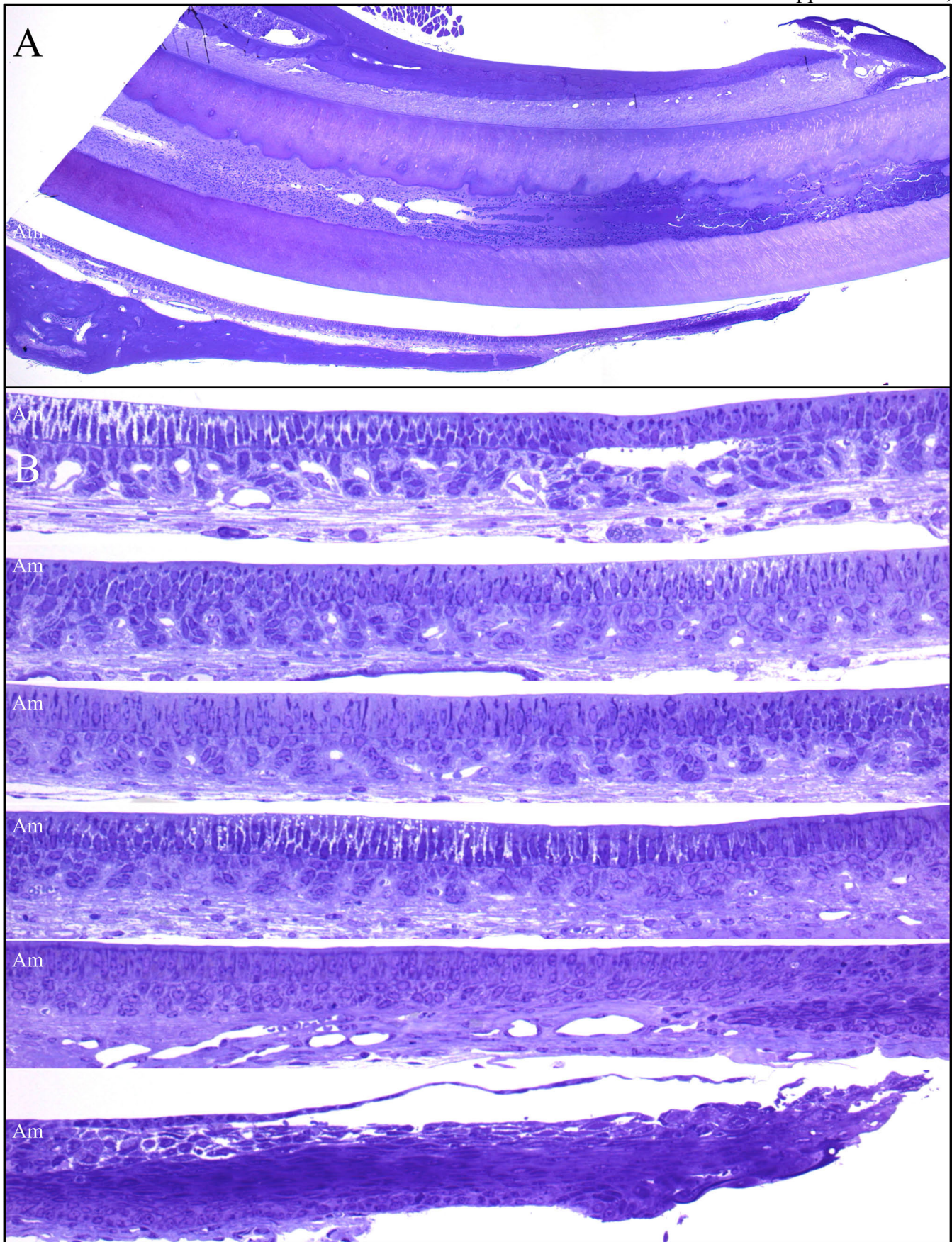


Fig. S40. Histology of *Fam83h^{Tr/Tr}* Mandibular Incisor at 7-weeks (F07 Block 2). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** Am, Ameloblasts.

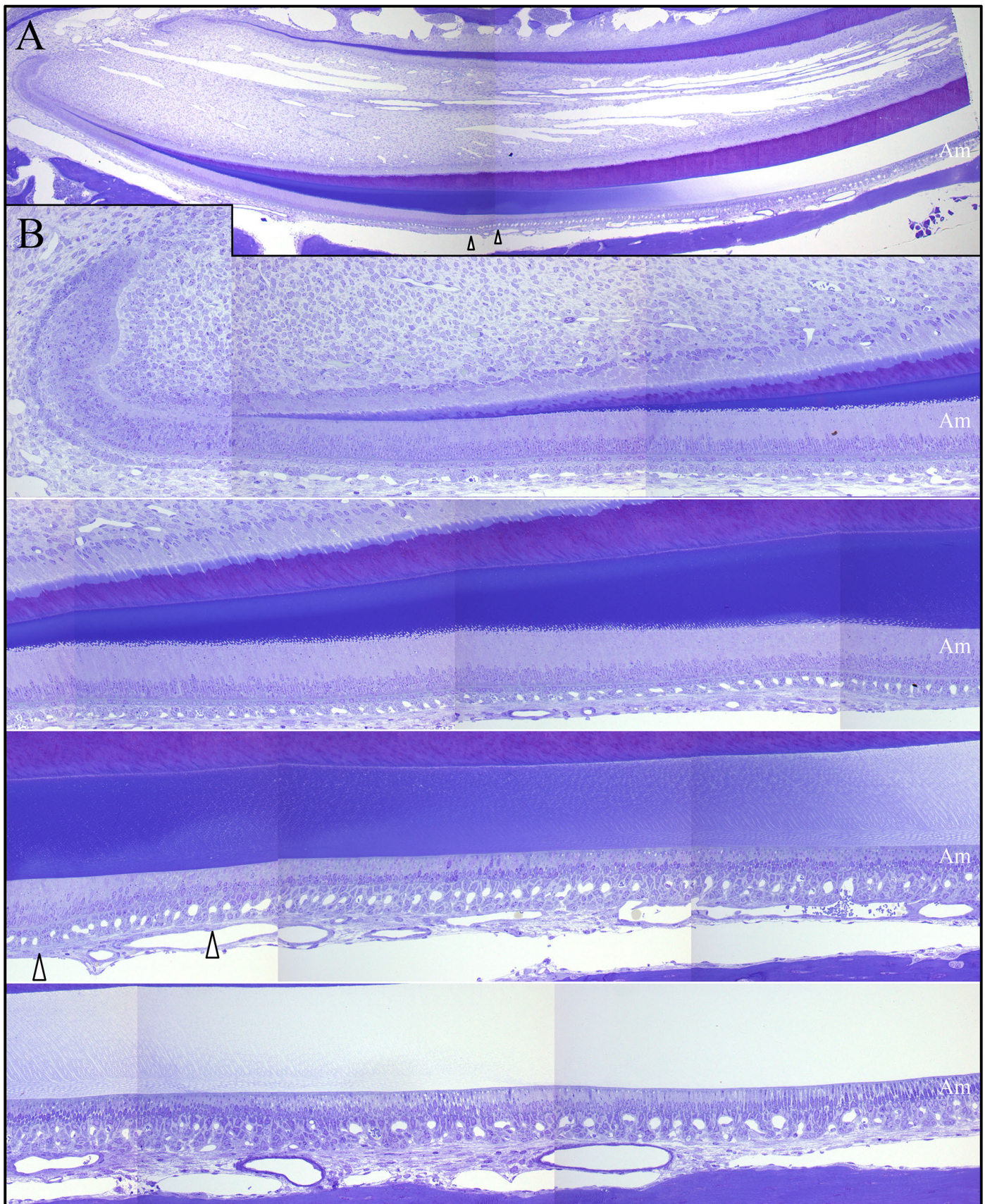


Fig. S41. Histology of *Fam83h^{Tr/+}* Mandibular Incisor at 7-weeks (F03 Block 1). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts.

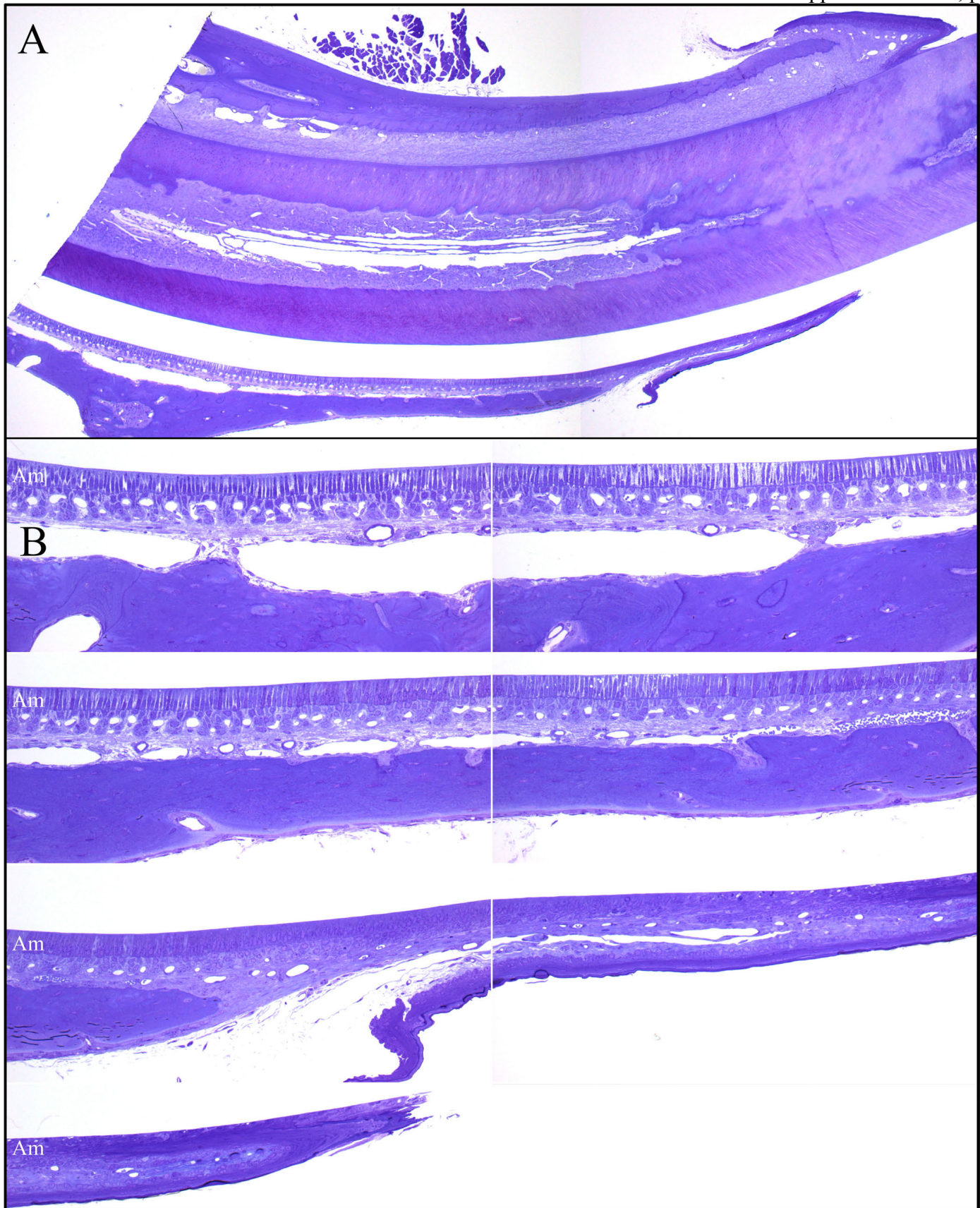


Fig. S42. Histology of *Fam83h^{Tr/+}* Mandibular Incisor at 7-weeks (F03 Block 2). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts.

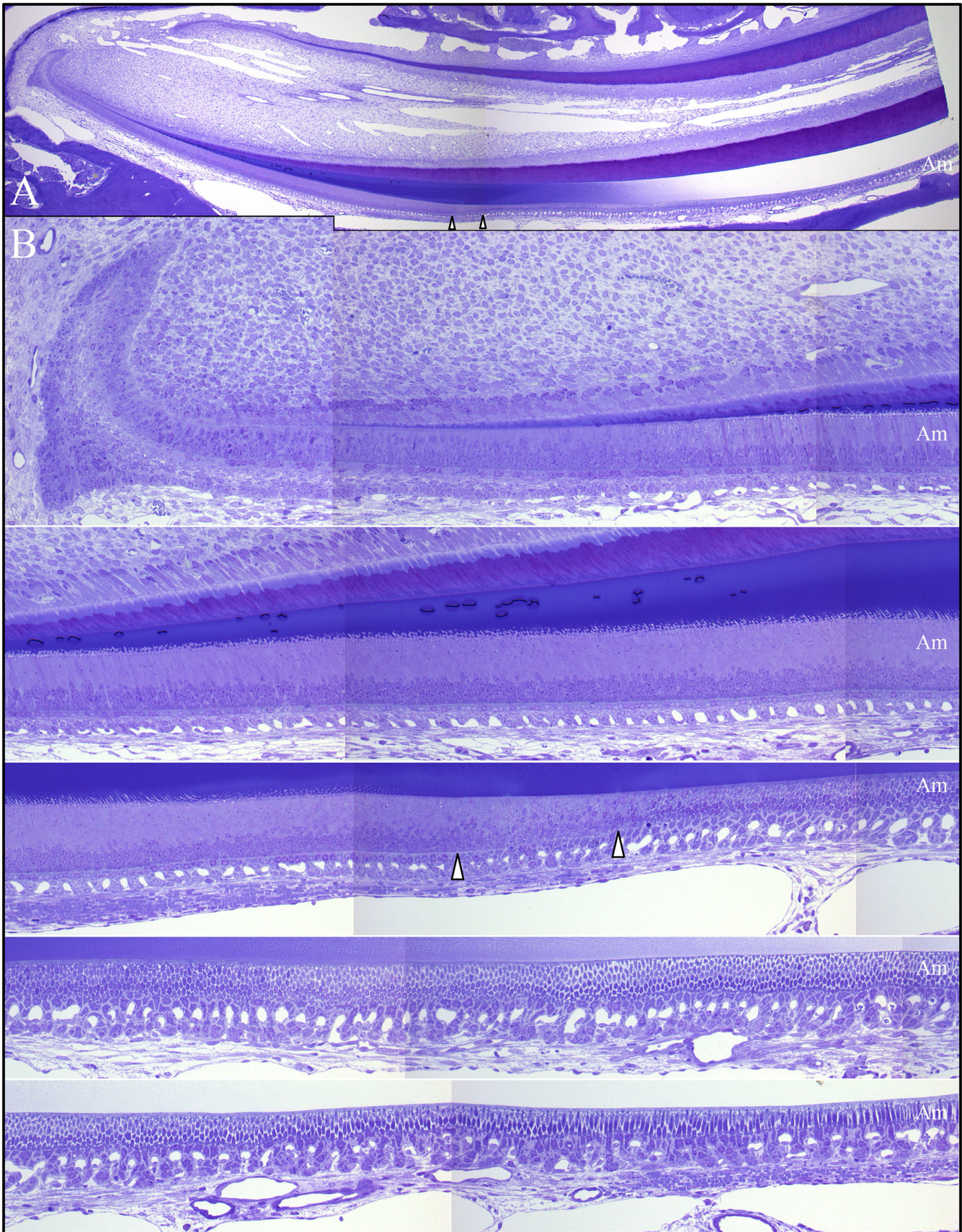


Fig. S43. Histology of *Fam83h^{Tr/+}* Mandibular Incisor at 7-weeks (F04 Block 1). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts.

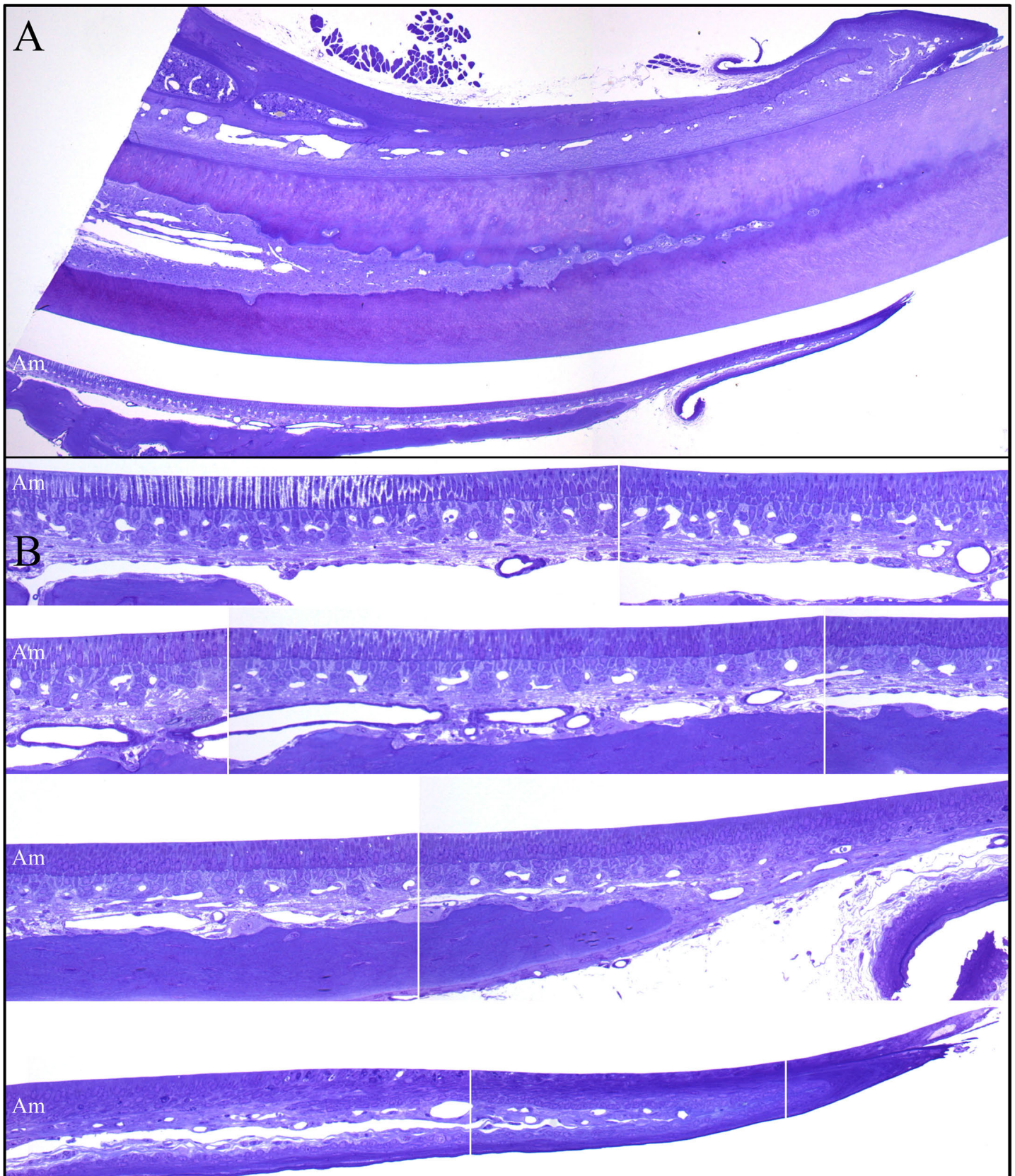


Fig. S44. Histology of *Fam83h^{Tr/+}* Mandibular Incisor at 7-weeks (F04 Block 2). **A:** Low magnification composite image. **B:** High magnification composite images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts.

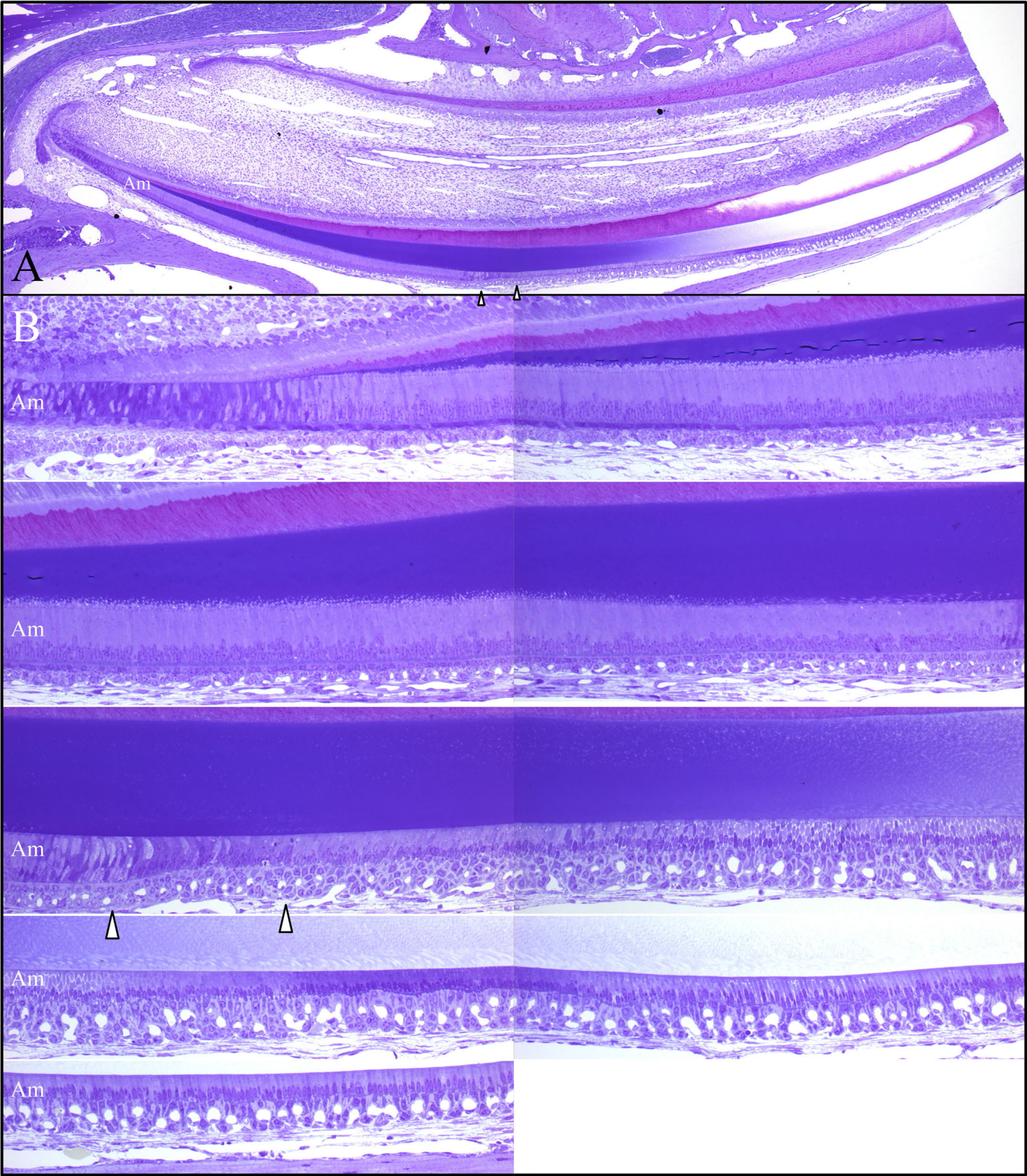


Fig. S45. Histology of *Fam83h*^{+/+} Mandibular Incisor at 7-weeks (WT17B1) *A*: Low magnification composite image. *B*: High magnification images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts; d, dentin; e, enamel.

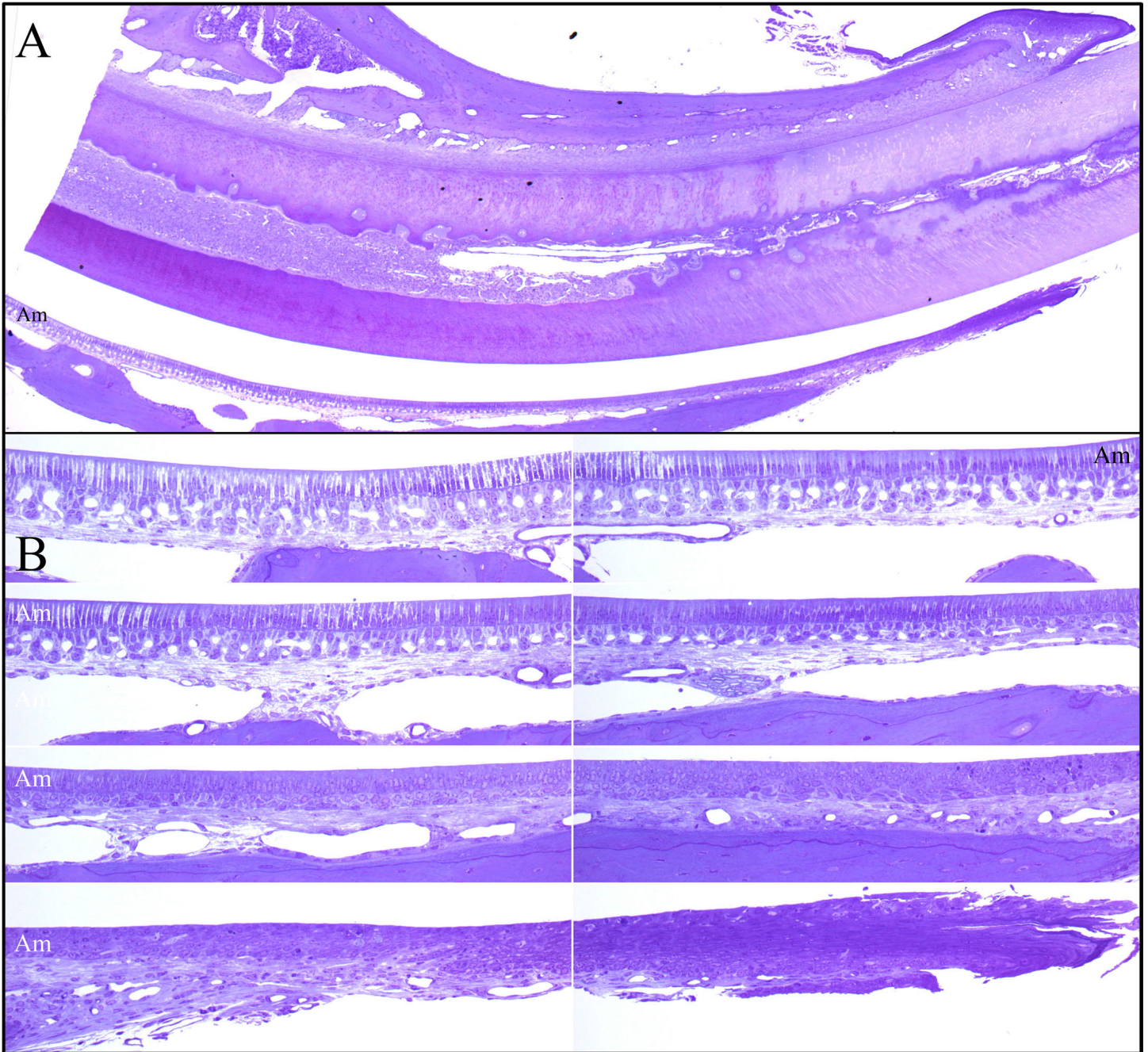


Fig. S46. Histology of *Fam83h*^{+/+} Mandibular Incisor at 7-weeks (WT17B2) **A:** Low magnification composite image. **B:** High magnification images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts; d, dentin; e, enamel.

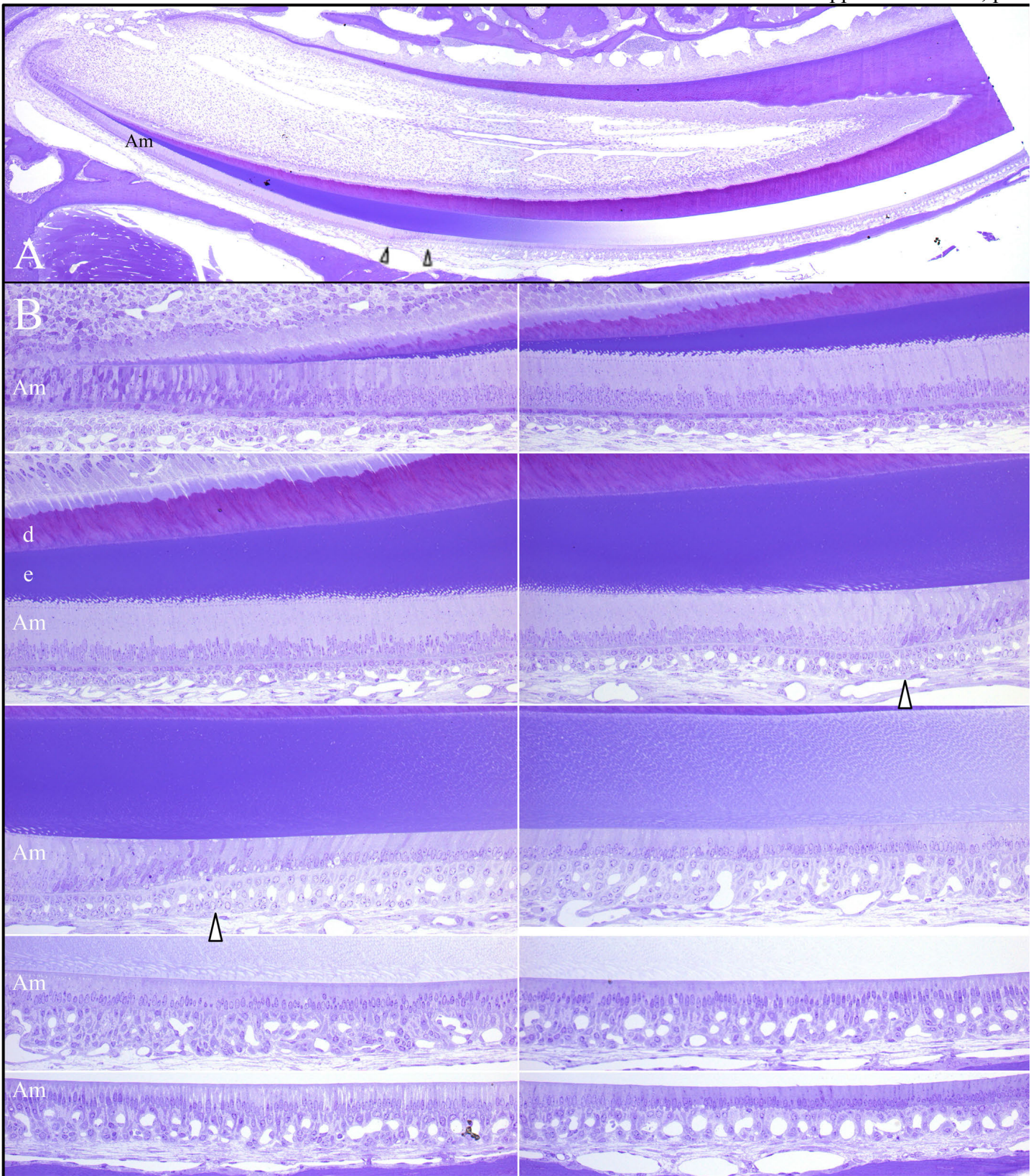


Fig. S47. Histology of *Fam83h*^{+/+} Mandibular Incisor at 7-weeks (WT17B2) **A:** Low magnification composite image. **B:** High magnification images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts; d, dentin; e, enamel.

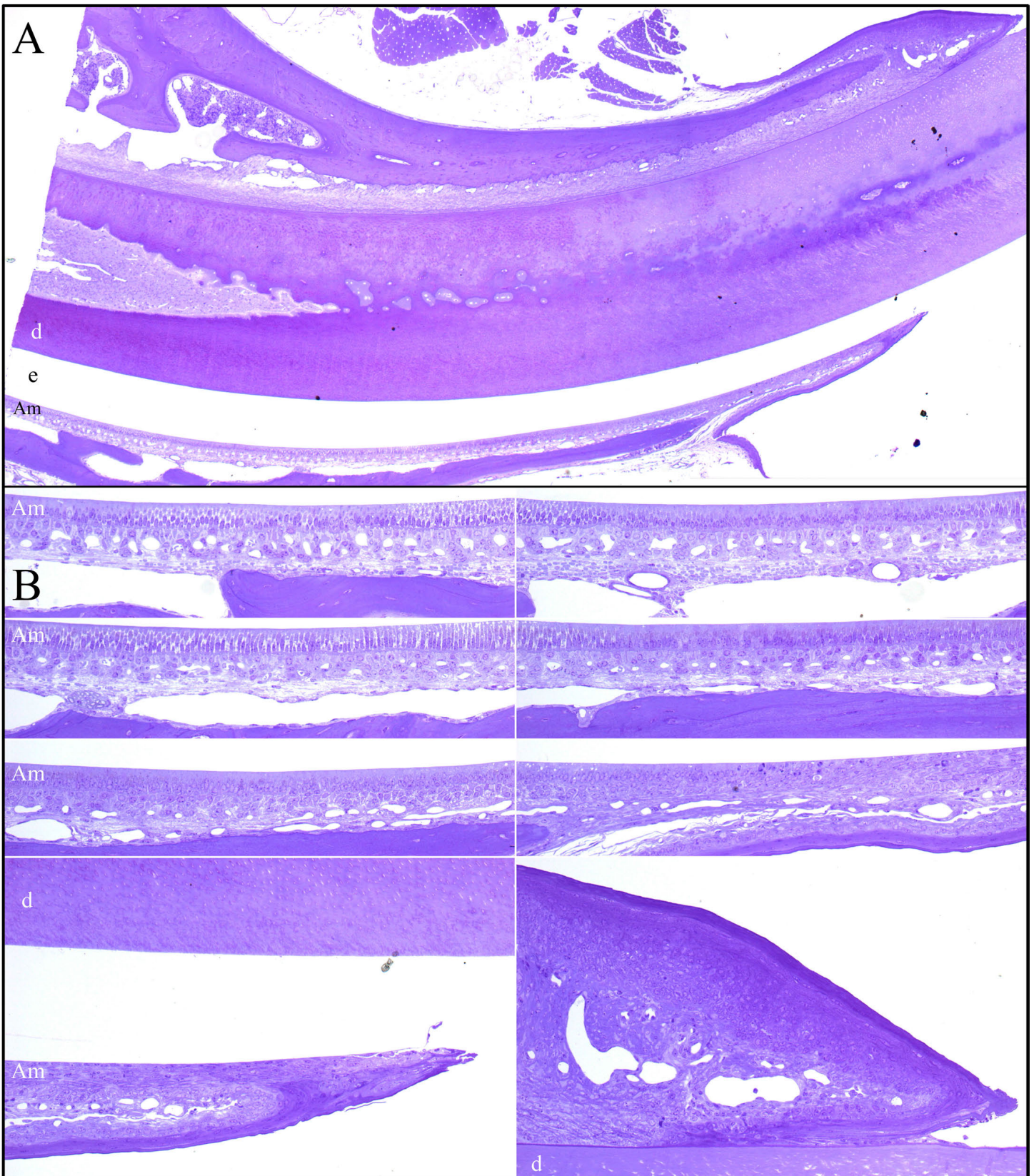


Fig. S48. Histology of *Fam83h*^{+/+} Mandibular Incisor at 7-weeks (WT17B2) **A:** Low magnification composite image. **B:** High magnification images of the mandibular incisor. **Key:** arrowheads mark the boundaries of the transition stage between the secretory and maturation stages of amelogenesis. Am, Ameloblasts; d, dentin; e, enamel.