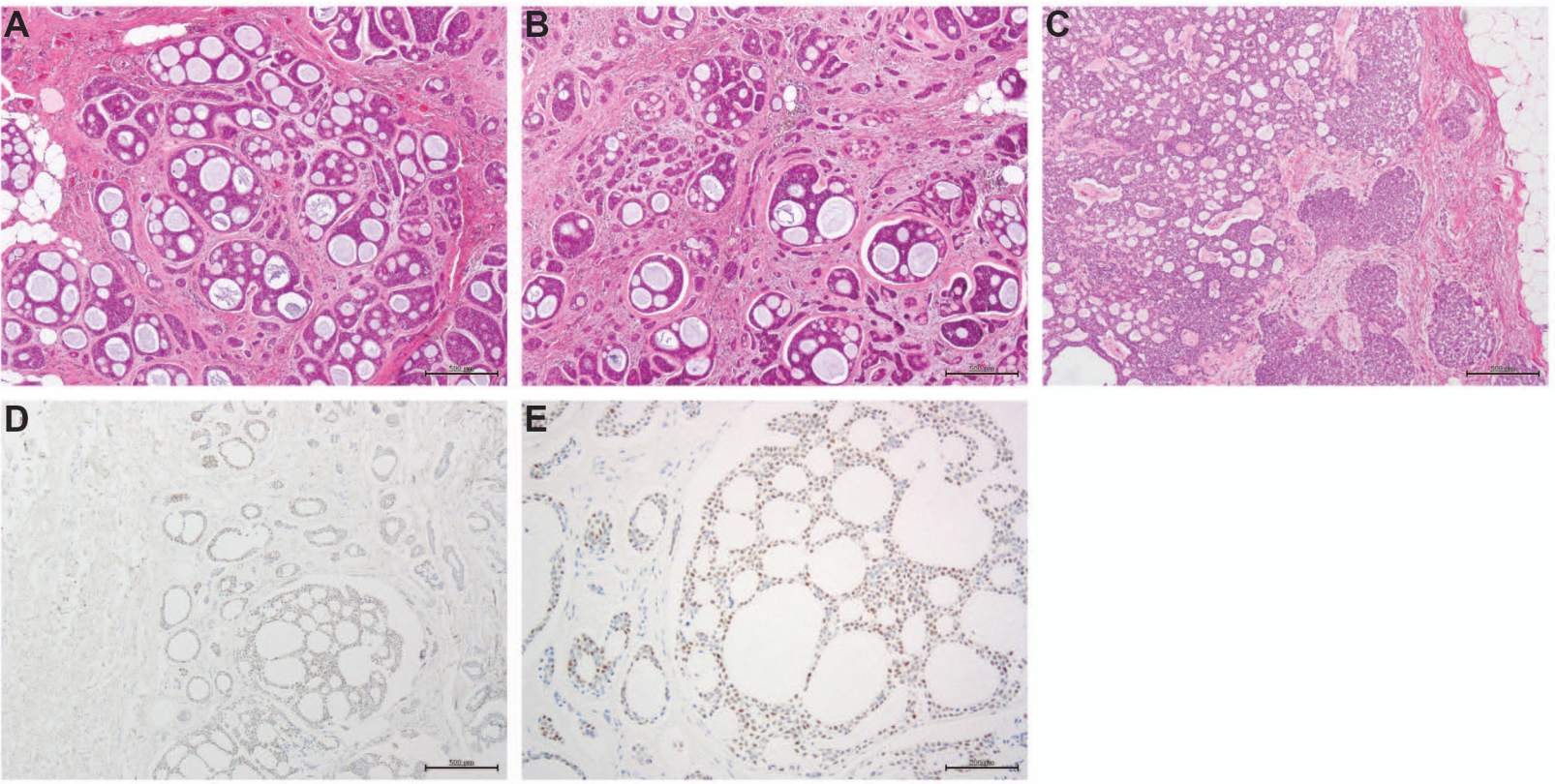
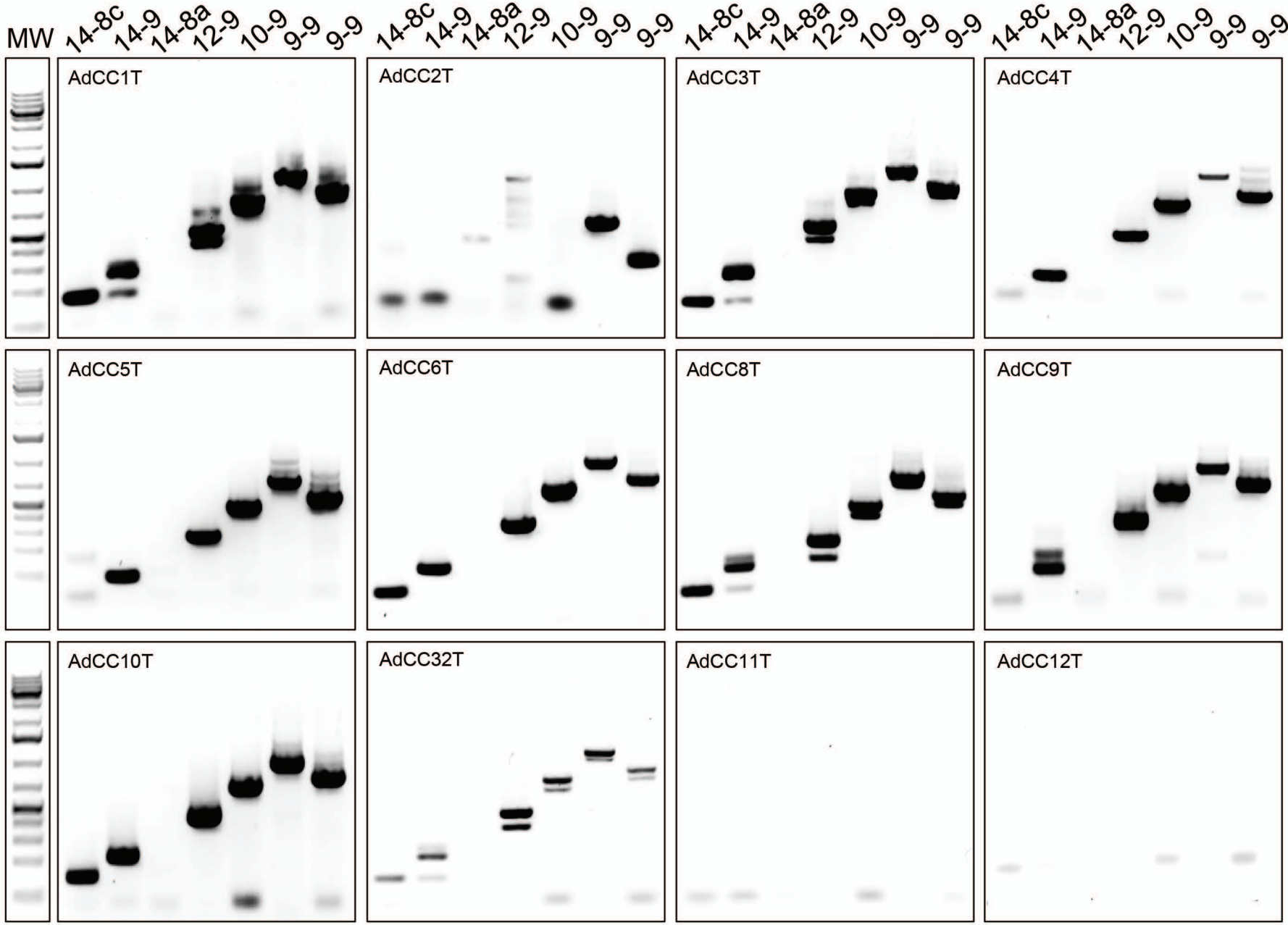
Supplementary Figure S1



Supplementary Figure S1. Adenoid cystic carcinomas of the breast.
Representative micrographs of breast adenoid cystic carcinomas displaying cribriform (A), tubular-cribriform (B) and solid-cribriform (C) growth patterns. (D, E) The presence of the *MYB-NFIB* fusion gene in adenoid cystic carcinomas of the breast results in expression of MYB at the protein level. Note the expression of MYB in the nuclear department of neoplastic cells. Scale bars 500µm A, B, C and D, 200µm E.

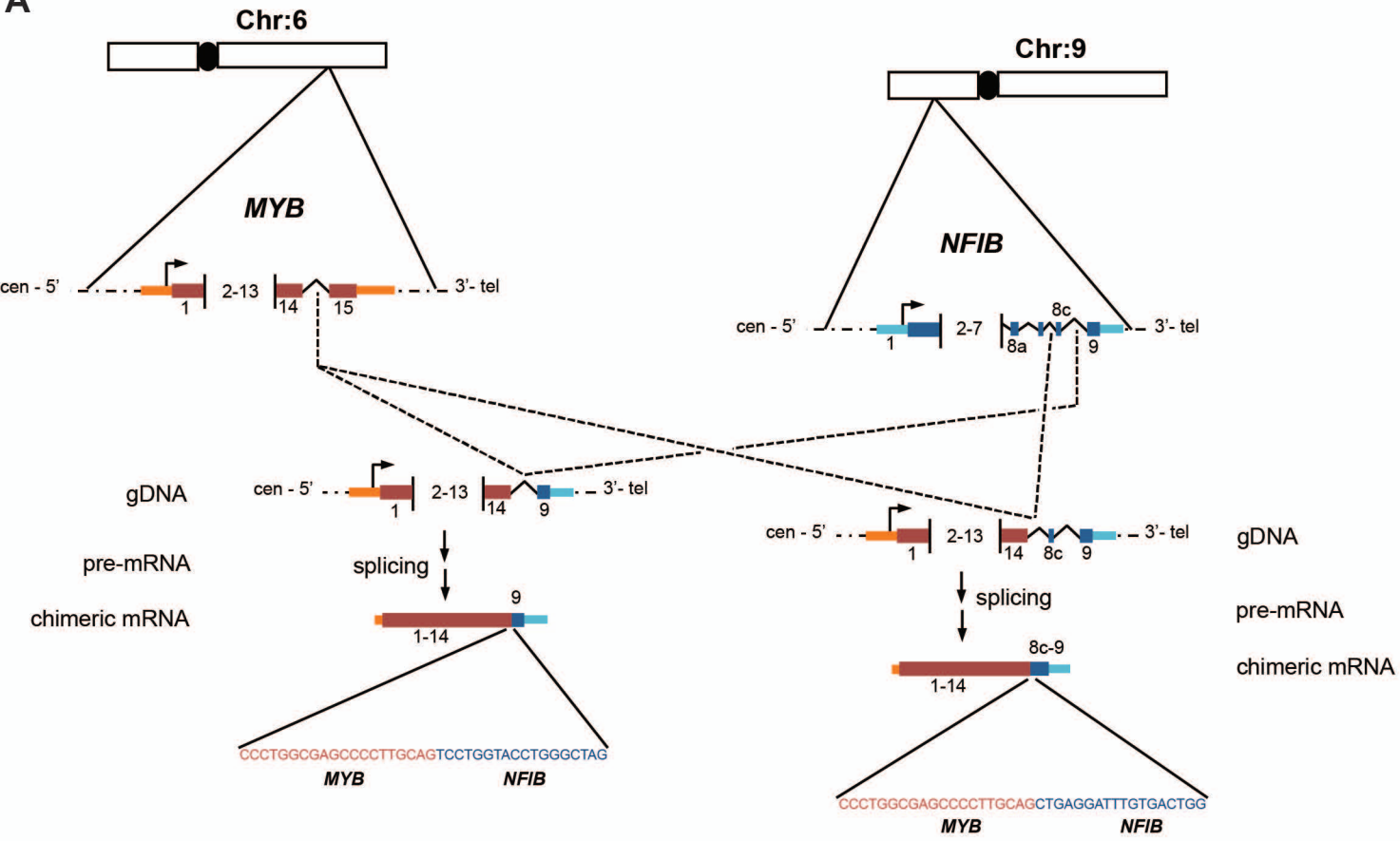
Supplementary Figure S2



Supplementary Figure S2. *MYB-NFIB* transcript detection by end-point (gel) RT-PCR in breast AdCCs.
MYB-NFIB fusion gene transcripts were detected using primers located in *MYB* exons 9, 10, 12 and 14, and *NFIB* exons 8a, 8c and 9. Lane names indicate exons tested. AdCC, adenoid cystic carcinoma; MW, molecular weight.

Supplementary Figure S3

A

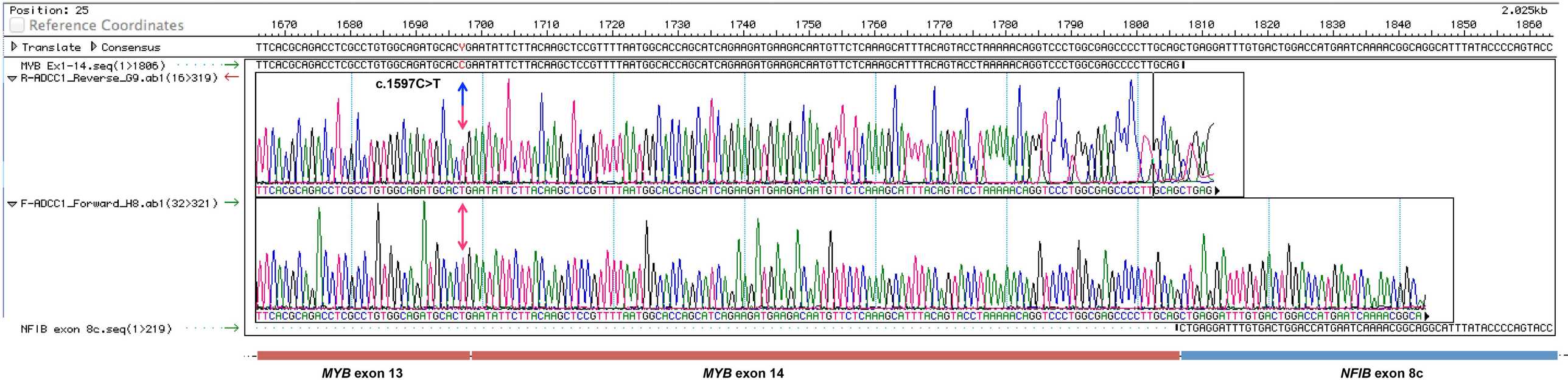


B

MYB-NFIB fusion transcript	Primer set 1 (14-8c)	Primer set 2 (14-9)	Primer set 3 (14-8a)	Primer set 4 (12-9)	Primer set 5 (10-9)	Primer set 6 (9-9)	Primer set 7 (9-9)
MYB(14)-NFIB(8c)	✔	✔	-	✔	✔	✔	✔
MYB(14)-NFIB(9)	-	✔	-	✔	✔	✔	✔
MYB(9)-NFIB(9)	-	-	-	-	-	✔	✔
MYB(14)-NFIB(8a)	-	✔	✔	✔	✔	✔	✔

Supplementary Figure S3. Illustration of the *MYB-NFIB* fusion gene and detection of the *MYB-NFIB* fusion transcript variants using RT-PCR. (A) Schematic illustration depicting the *MYB* and *NFIB* genes as well as the two most common *MYB-NFIB* fusion genes found in breast AdCCs in this study. Translocation breakpoints are indicated. Cen, centromere; tel, telomere. (B) RT-PCR primer sets used to infer the *MYB* and *NFIB* exons involved in the *MYB-NFIB* fusion transcript variants detected. Numbers refer to the *MYB* and *NFIB* exons. -, absence of PCR product; √, presence of PCR product. For primer sequences, please see Supplementary Table S1.

Supplementary Figure S4



Supplementary Figure S4. Presence of a somatic *MYB* mutation in the *MYB-NFIB* fusion gene transcript of case AdCC1T.
Sequence traces obtained through cDNA analysis showing the missense mutation in the exon 13 splice site of the *MYB* allele that is part of the *MYB-NFIB* fusion gene transcript in case AdCC1T. The somatic mutation is indicated by arrows.