Figure S1

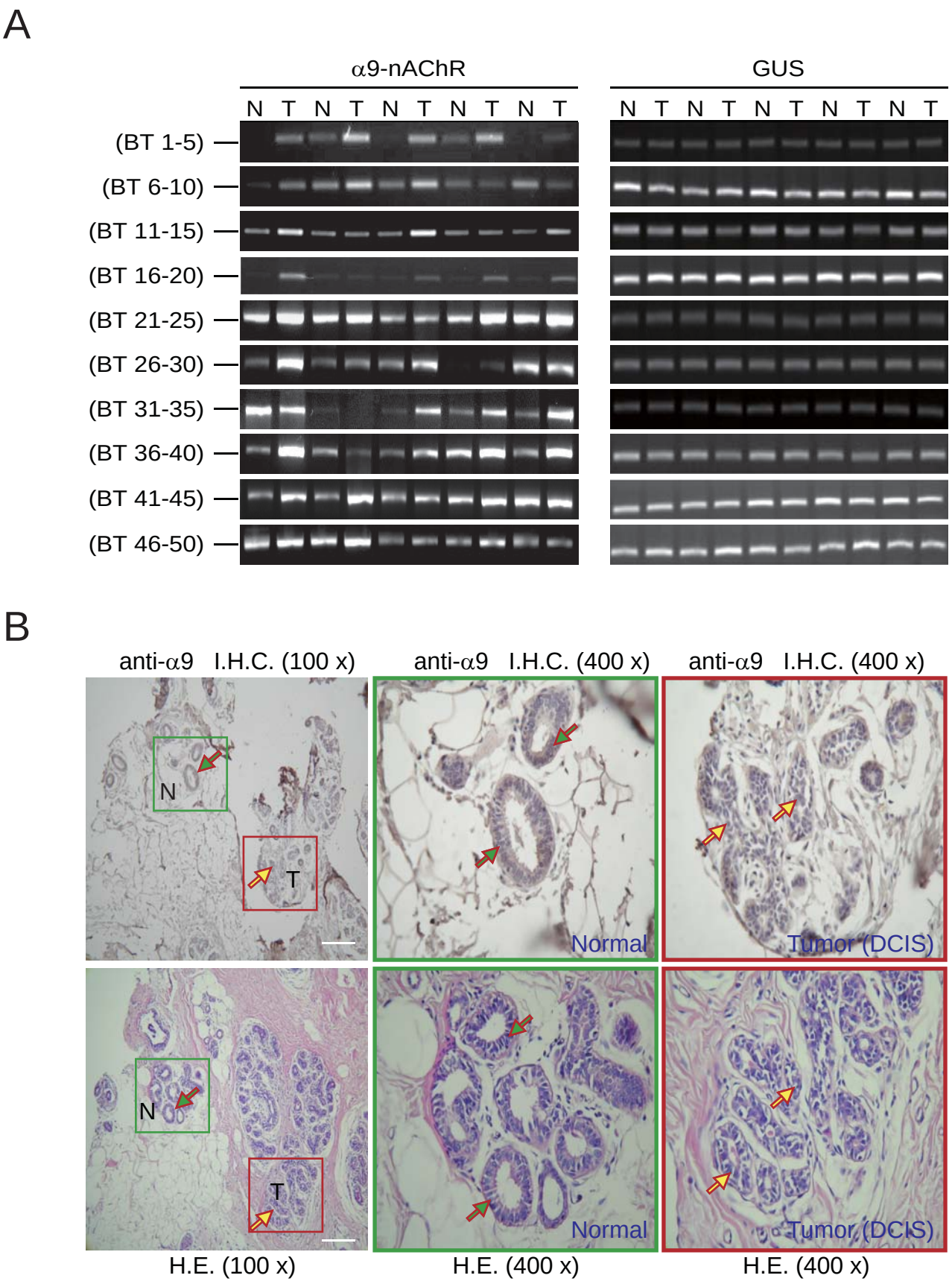
A
α9-nAChR
GUS
N T N T N T N T N T
(BT 1-5)
(BT 6-10)
(BT 11-15)
(BT 16-20)
(BT 21-25)
(BT 26-30)
(BT 31-35)
(BT 36-40)
(BT 41-45)
(BT 46-50)
B
anti-α9 I.H.C. (100 x)
anti-α9 I.H.C. (400 x)
anti-α9 I.H.C. (400 x)
N
T
Normal
Tumor (DCIS)
H.E. (100 x)
H.E. (400 x)
H.E. (400 x)

Figure S1. Analysis of α9-nicotinic acetylcholine receptor (α9-nAChR) expression in human breast carcinoma tissues. **A)** Determination of α9-nAChR mRNA levels using reverse transcription-polymerase chain reaction (RT-PCR). Both α9-nAChR and β-glucuronidase (GUS) transcripts were detected as single bands (403 and 165 base pairs, respectively) in both tumor and adjacent normal tissues. PCR was performed for 30 cycles. The agarose gel image showed 50 randomly-chosen and representative patients. **B)** Immunolocalization of α9-nAChR protein in human ductal carcinoma in situ (DCIS) breast tumor tissues. The tumor tissues were cut into 8 μm serial sections, and then stained with antibodies specific to human α9-nAChR. N, normal; T, tumor; I.H.C., immunohistochemistry stain; H.E., hematoxylin and eosin stain. No statistically significant increase in α9-nAChR protein expression (brown-stain) was detected in early stage tumor tissues diagnosed as DCIS (Figure S1, B, **red square frame**, indicated by **yellow arrows**). As expected, normal tissues did not express substantial levels of α9-nAChR (Figure S1, B, **green square frame**, indicated by **green arrows**). Scale bar = 200 μm.