



**Figure S7. FISH with 20x *HER2* DNA probe concentration.** **A:** Forty-five percent formamide buffer with 20x DNA concentration. **B:** Forty-five percent formamide buffer with 20x DNA concentration and 1x Cot-1. **C:** Fifteen percent EC buffer with 1x DNA concentration. CEN-17 PNA probe concentration was kept constant. The images in FITC/TxRed are merged micrographs of green CEN-17 PNA probes and red *HER2* DNA. The FFPE breast carcinoma tissue sections were denatured at 67°C for 10 minutes and hybridized at 45°C for 60 minutes. The images are taken with identical exposure times. DAPI, is stained blue in FITC/TxRed/DAPI. Scale bar, 10  $\mu$ m.