Supplemental Figure 1

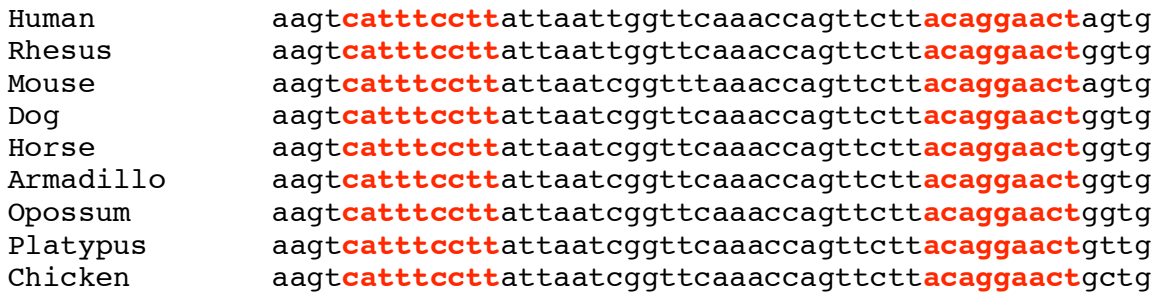


Fig. 1. The human mIR-21 promoter contains two perfectly conserved, candidate ETS-1 binding sites. Comparing the sequence of a miR-21 promoter region (chr17:55,269,992-55,270,041) from human, rhesus, mouse, dog, horse, armadillo, opossum, platypus, and chicken identified two perfectly conserved candidate binding sites for Ets-1 transcription factors (red color). All nucleotides in the two candidate Ets-1 binding sites are perfectly conserved among all 9 species.

Supplemental Figure 2

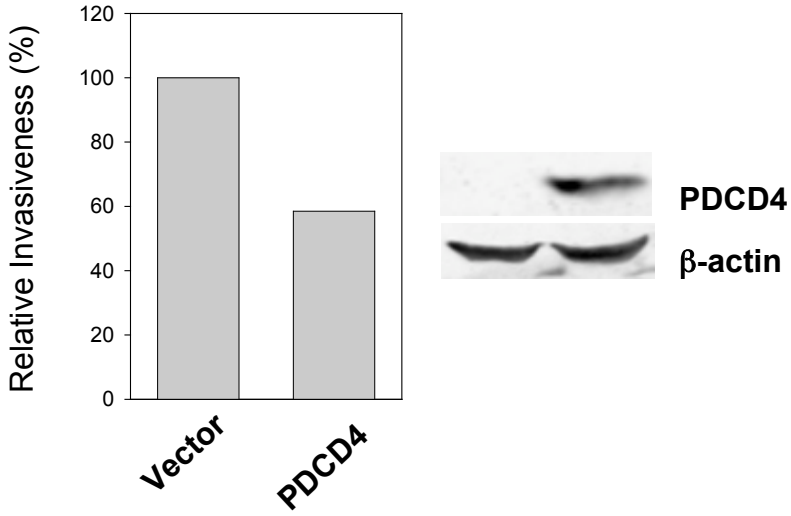


Fig 2. PDCD4 inhibits invasiveness of 435/HER2 cells. 435/HER2 cells were transiently transfected with vector or PDCD4. One day after transfection, the cells were transferred to matrigel chambers for the invasive activity or subject to Western blot analysis. For measuring the invasive activity, the cells that crossed the matrigel membrane were counted and the value was normalized with the number of vector control cells to obtain the relative invasiveness (%). For the western blot, the membrane was probed with Myc tag antibody. Values are averages of two experiments after normalizing vector control as 100%.

Supplemental Figure 3

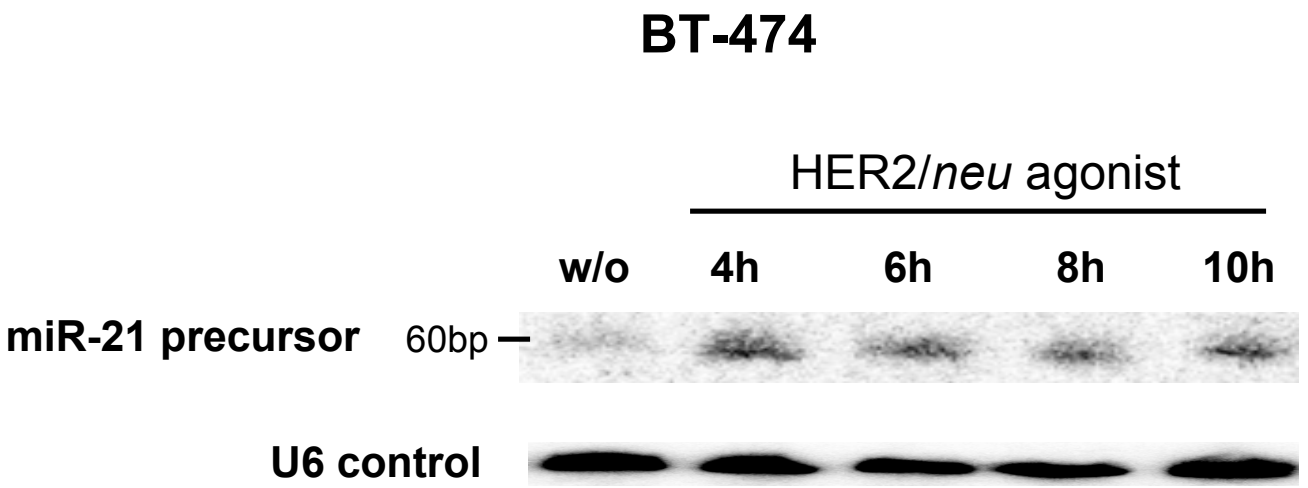


Fig. 3. HER2/neu signaling activates miR-21 precursor in breast cancer cells. BT474 cells were treated with HER2/neu agonist at varying time points, and the RNA was analyzed by Northern blot for 60 bp miR-21 precursor expression

Supplemental Figure 4

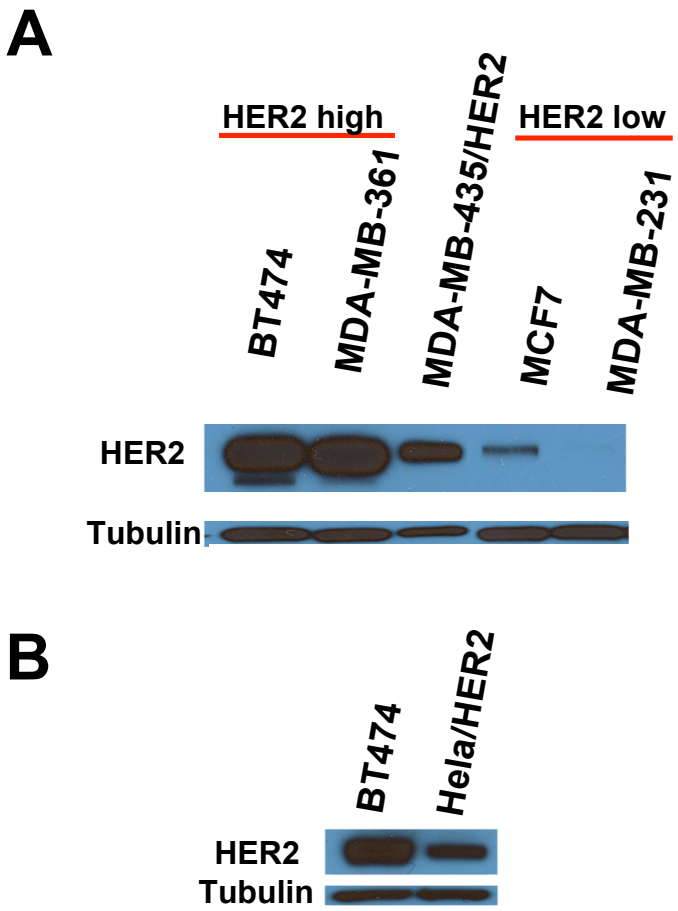
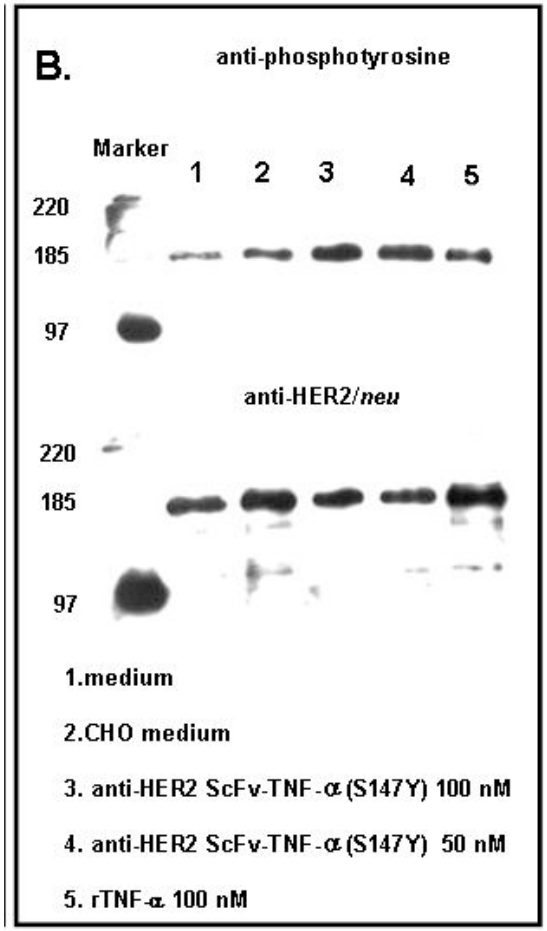


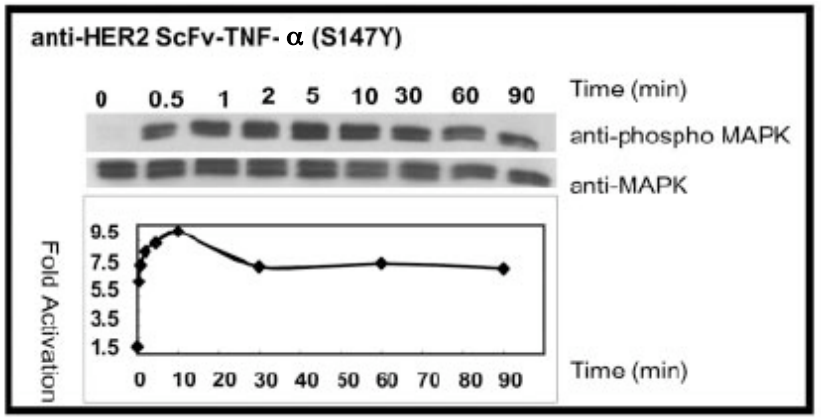
Fig. 4. HER2/*neu* expression in MDA-MB-435/HER2 and Hela/HER2 cells compared to other human breast cancer cells. The cell lysates were separated by SDS-PAGE And analyzed by western blot using anti-HER2/neu antibody or anti-tubulin antibody.

Supplemental Figure 5

HER2 tyrosine phosphorylation



ERK1/2 phosphorylation



AKT phosphorylation