

## **Effect of Wnt5a on drug resistance in estrogen receptor-positive breast cancer**

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## **Online Resource 1**

### **A. The materials used in the cell viability assay**

| Materials                  | Manufacturing company                                  | catalog number |
|----------------------------|--|----------------|
| (Z)-4-hydroxytamoxifen     | Sigma-Aldrich (St. Louis, MO, USA)                     | H7904          |
| Epirubicin (hydrochloride) | Cayman Chemical (Ann Arbor, MI, USA)                   | 1640184        |
| Paclitaxel                 | FUJIFILM Wako Pure Chemical Corporation (Osaka, Japan) | 33069-62-4     |
| Cyclophosphamide           | FUJIFILM Wako Pure Chemical Corporation (Osaka, Japan) | 030-12953      |
| 5-fluorouracil             | FUJIFILM Wako Pure Chemical Corporation (Osaka, Japan) | 068-01401      |

### **B. List of antibodies used in western blot analysis**

| Antibody   | Manufacturing company                        | catalog number |
|--|--|----------------|
| Anti-Wnt5a/b rabbit monoclonal antibody              | Cell Signaling Technology (Beverly, MA, USA) | 2530           |
| Anti-phospho-AKT (Ser473) antibody                   | Cell Signaling Technology (Beverly, MA, USA) | 9271           |
| Anti-phospho-AKT (Thr308) rabbit monoclonal antibody | Cell Signaling Technology (Beverly, MA, USA) | 4056           |
| Anti-phospho-SAPK/JNK (Tyr185) antibody              | Cell Signaling Technology (Beverly, MA, USA) | 9251           |
| Anti-ER antibody                                     | Abcam (Cambridge, UK)                        | ab16660        |
| Anti-HER2 antibody                                   | Abcam (Cambridge, UK)                        | ab214275       |
| Anti-β-actin antibody                                | Sigma-Aldrich (St Louis, MO, USA)            | A5441          |

### C. The nucleotide sequences of the primers used in this study

| Primer            | Nucleotide sequence  |
|-------------------|--|
| E542K and E545D/K | 5' -GCTAGAGACAATGAATTAAGGGAAAA-3' (forward) and 5' -CTCCATTAGCACTTACCTGTGAC-3' (reverse) |
| H1047R/L          | 5' -GCAAGAGGCTTGAGTATT-3' (forward) and 5' -GTGTGGAAGATCCAATCCATT-3' (reverse)           |
| Wnt5a             | 5' -AAGTTGGTACAGGTCAACAGCCGCT-3' (forward) and 5' -CACATGAGCTCGCAGCCATCCATG-3' (reverse) |
| β-actin.          | 5' -TGAGCGCGCTACAGCTT-3' (forward) and 5' -TCCTTAATGTCACGCACGATT-3' (reverse)            |