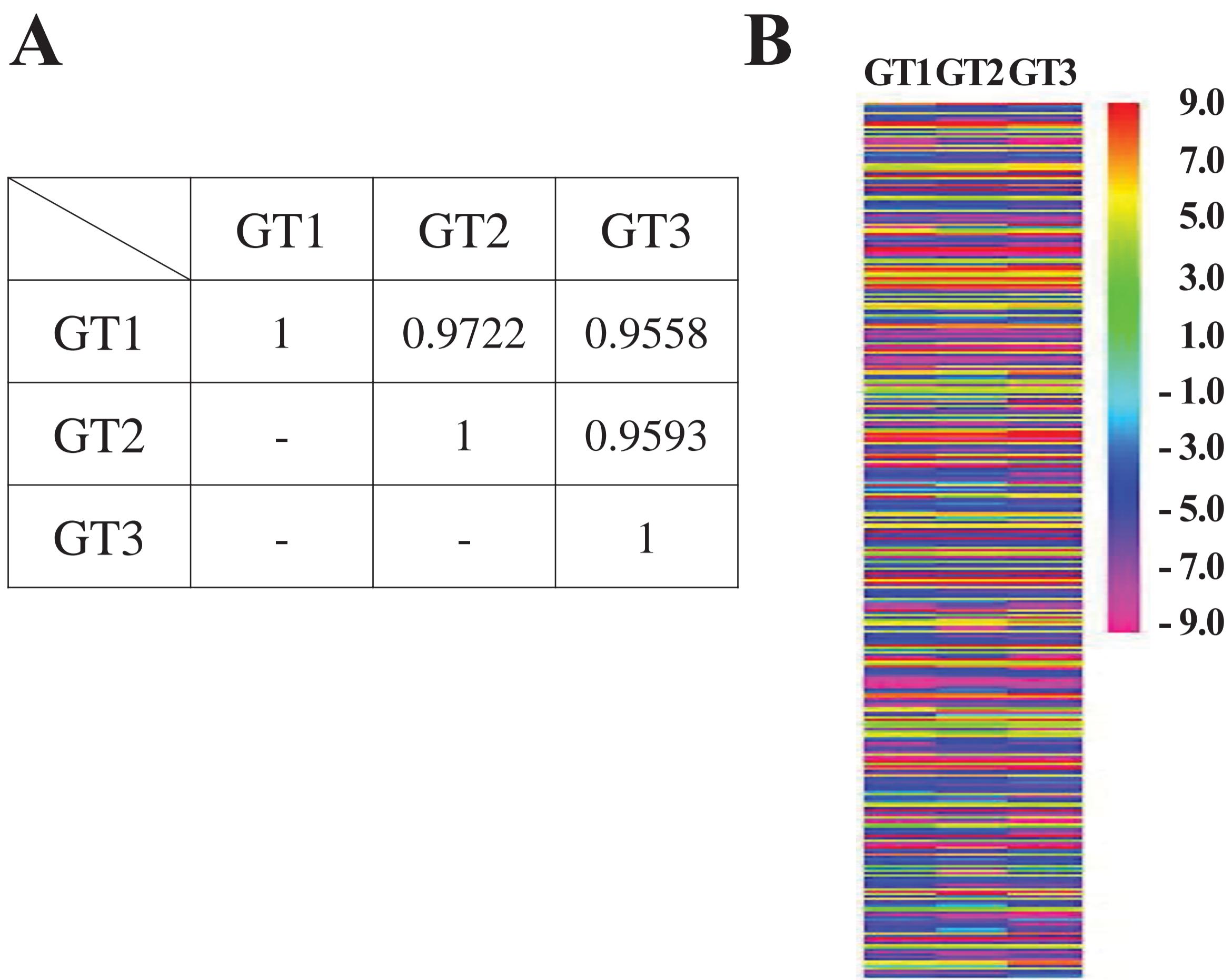


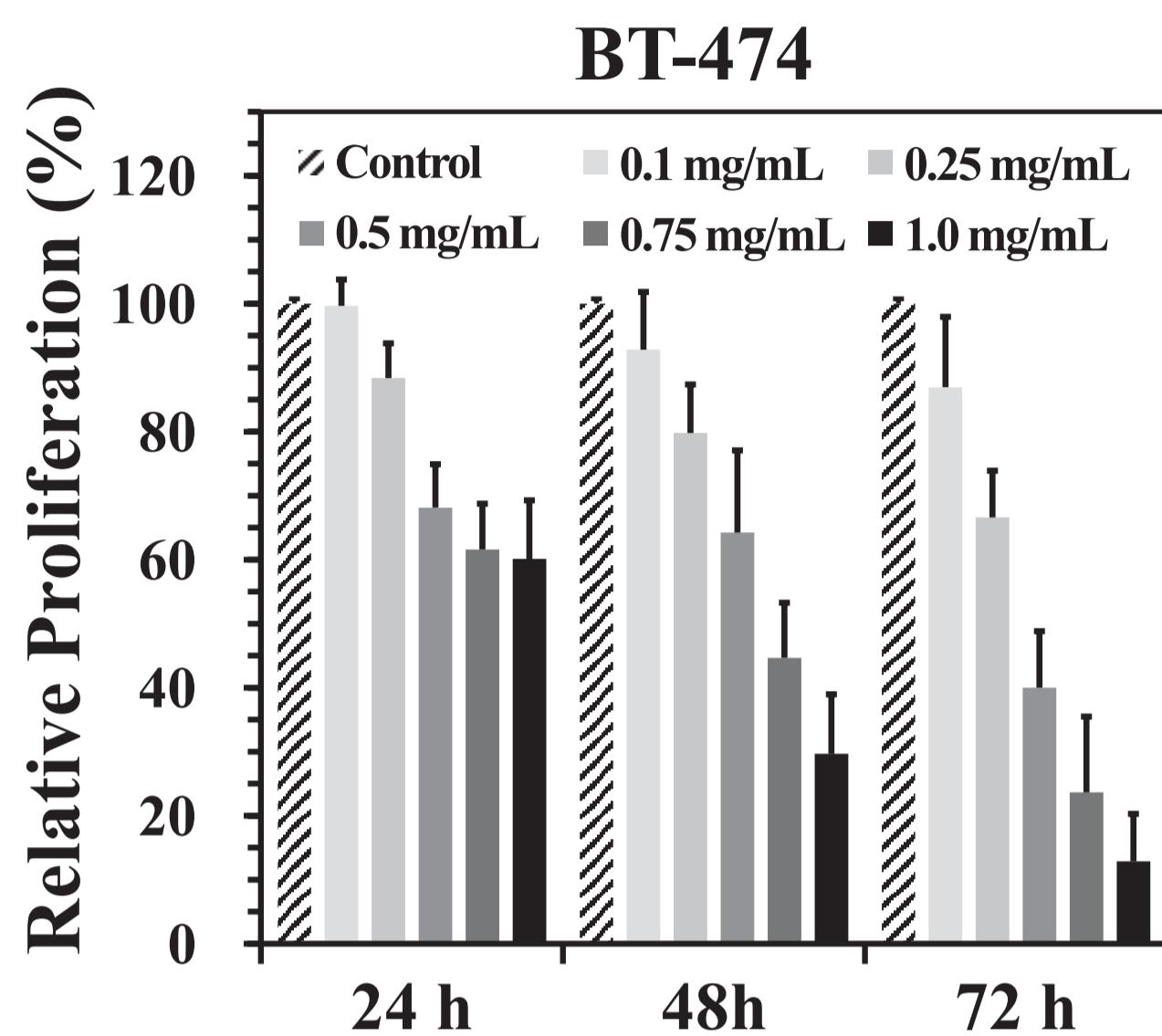
# Supplementary Fig. S1



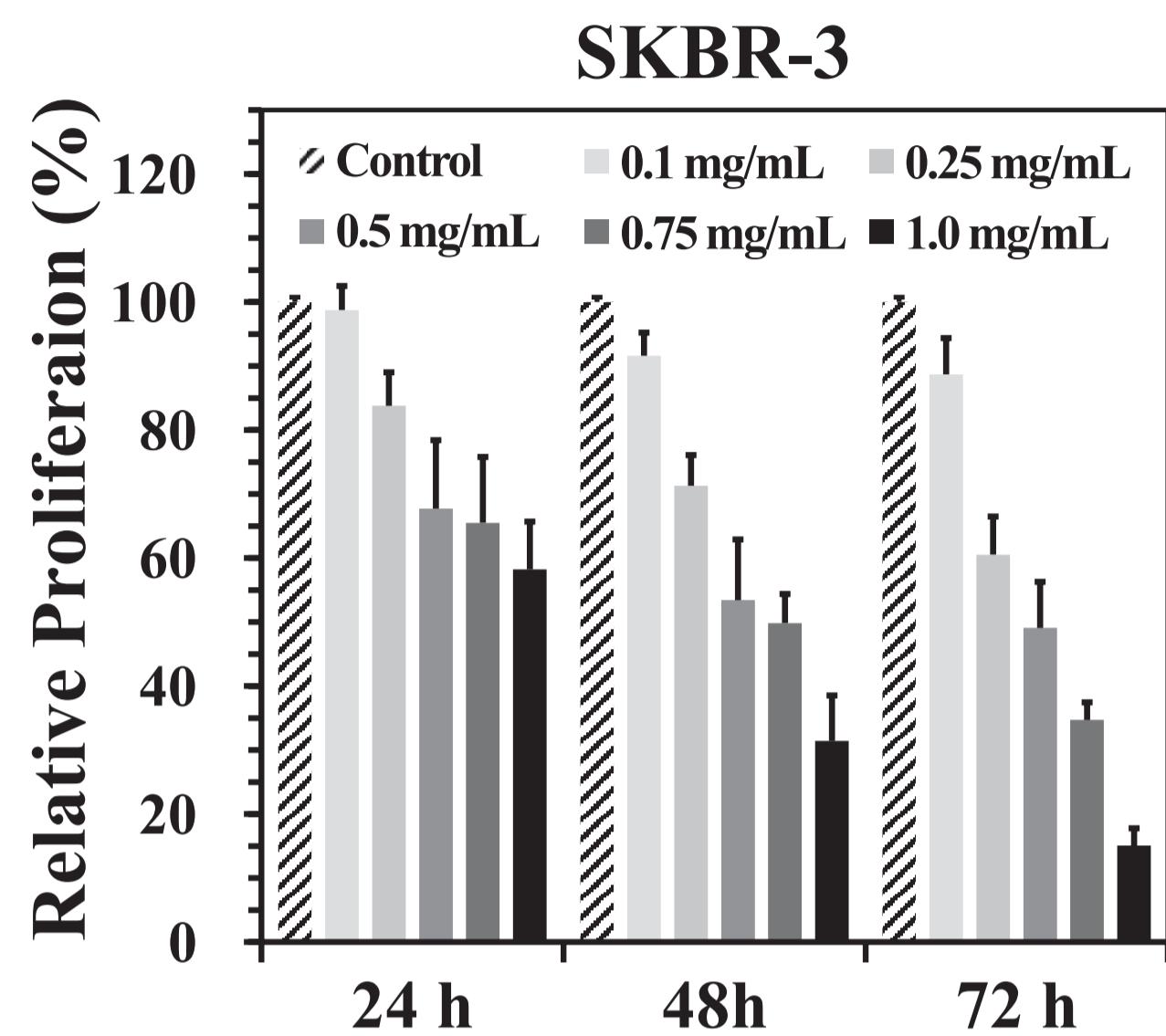
**Supplementary Fig. S1:** Quality control of *Ganoderma tsugae* extracts (GTEs). (A) Phytomics Similarity Index (PSI) (judged by PhytoViewerBR2.2, PhytoCeutica, Inc.). (B) The bioresponse fingerprint (BF) of GTEs. BF expressed as a color graph.

## Supplementary Fig. S2

A



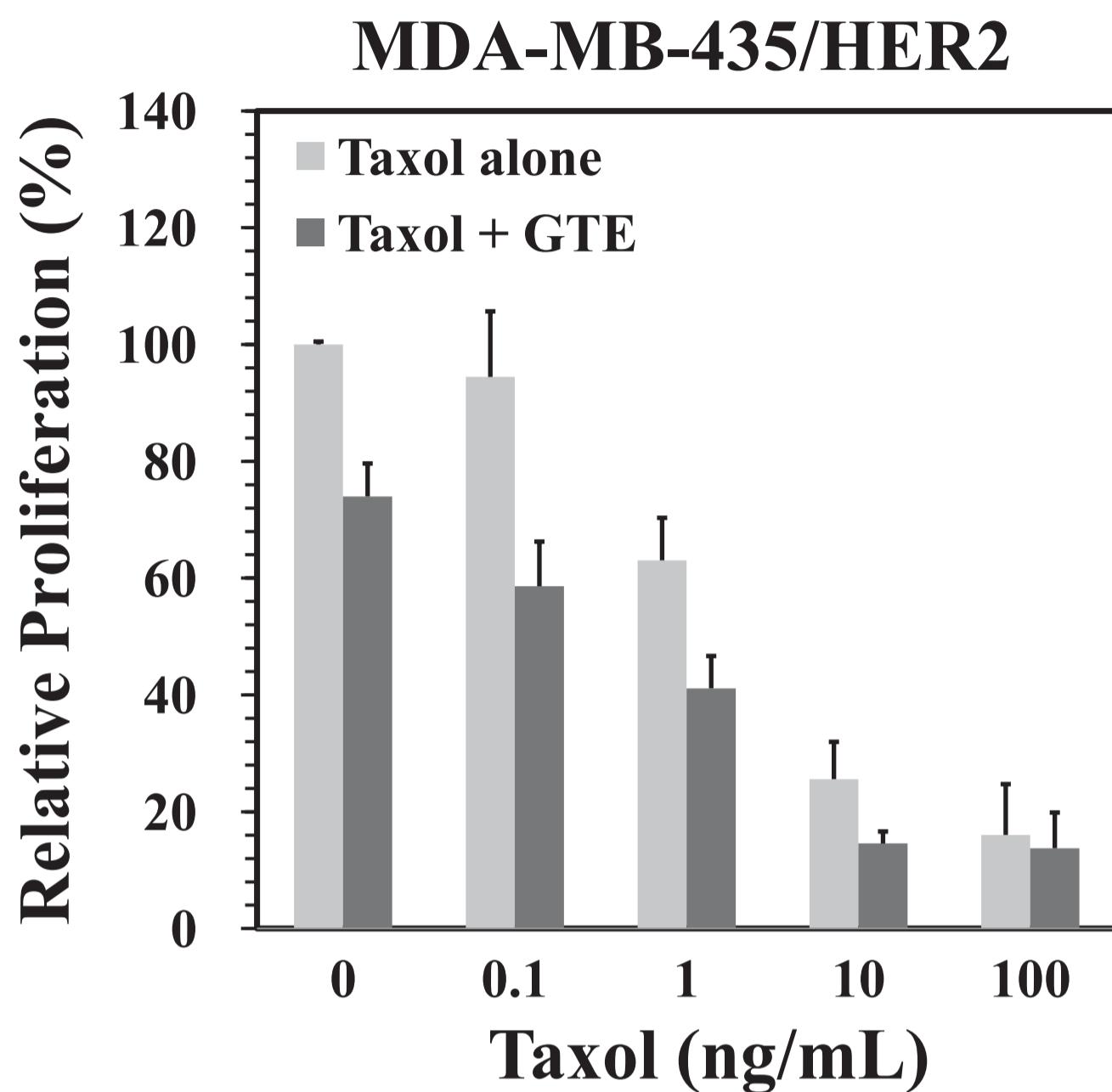
B



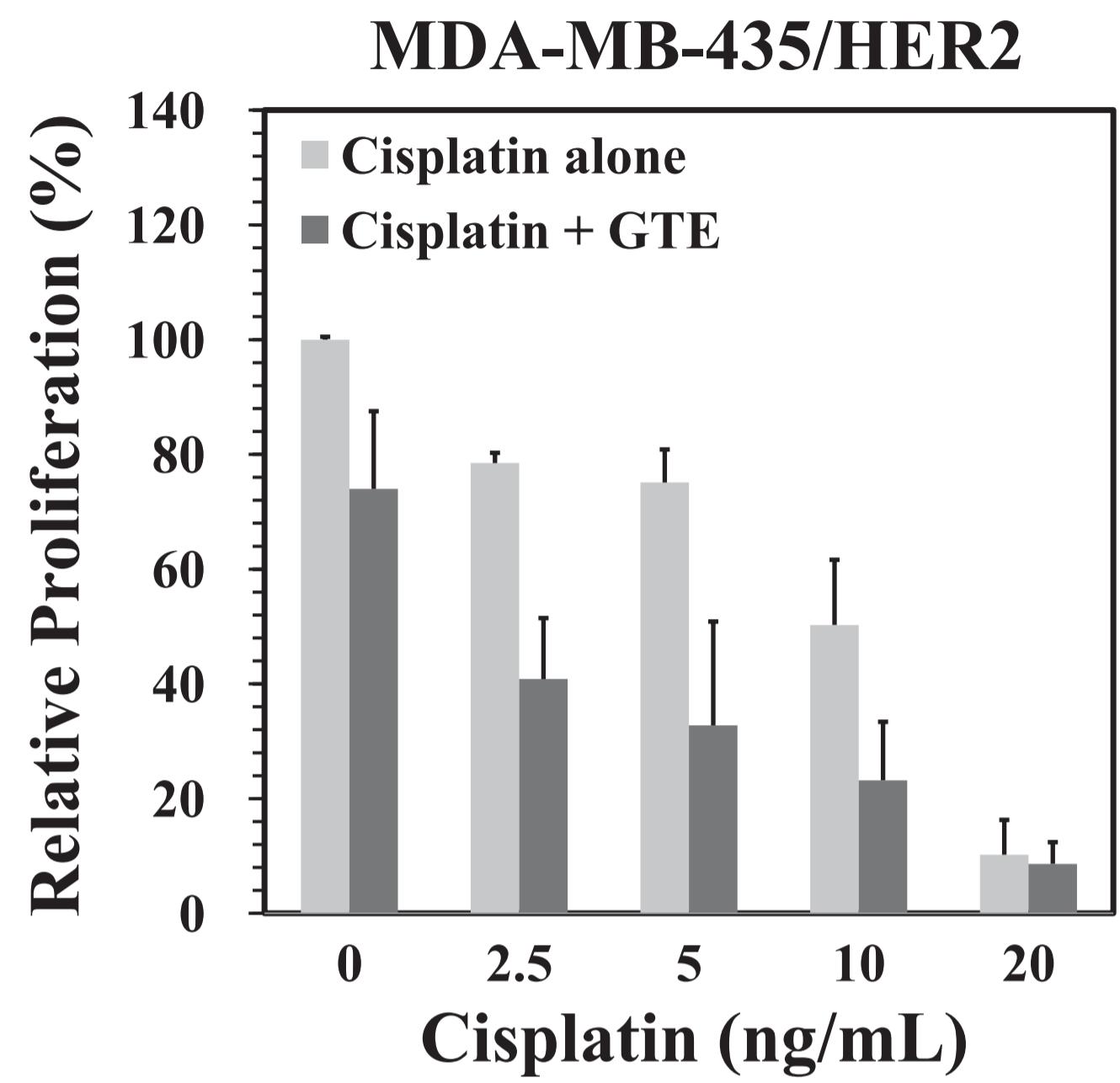
**Supplementary Fig. S2:** Effect of GTE on cell proliferation of HER2-overexpressing cancer cells. BT-474 (A) and SKBR-3 (B) cells were treated with various concentration of GTE (0.1, 0.25, 0.5, 0.75, and 1 mg/mL) for 72 h. Cell proliferation was determined using the MTT assay.

## Supplementary Fig. S3

A



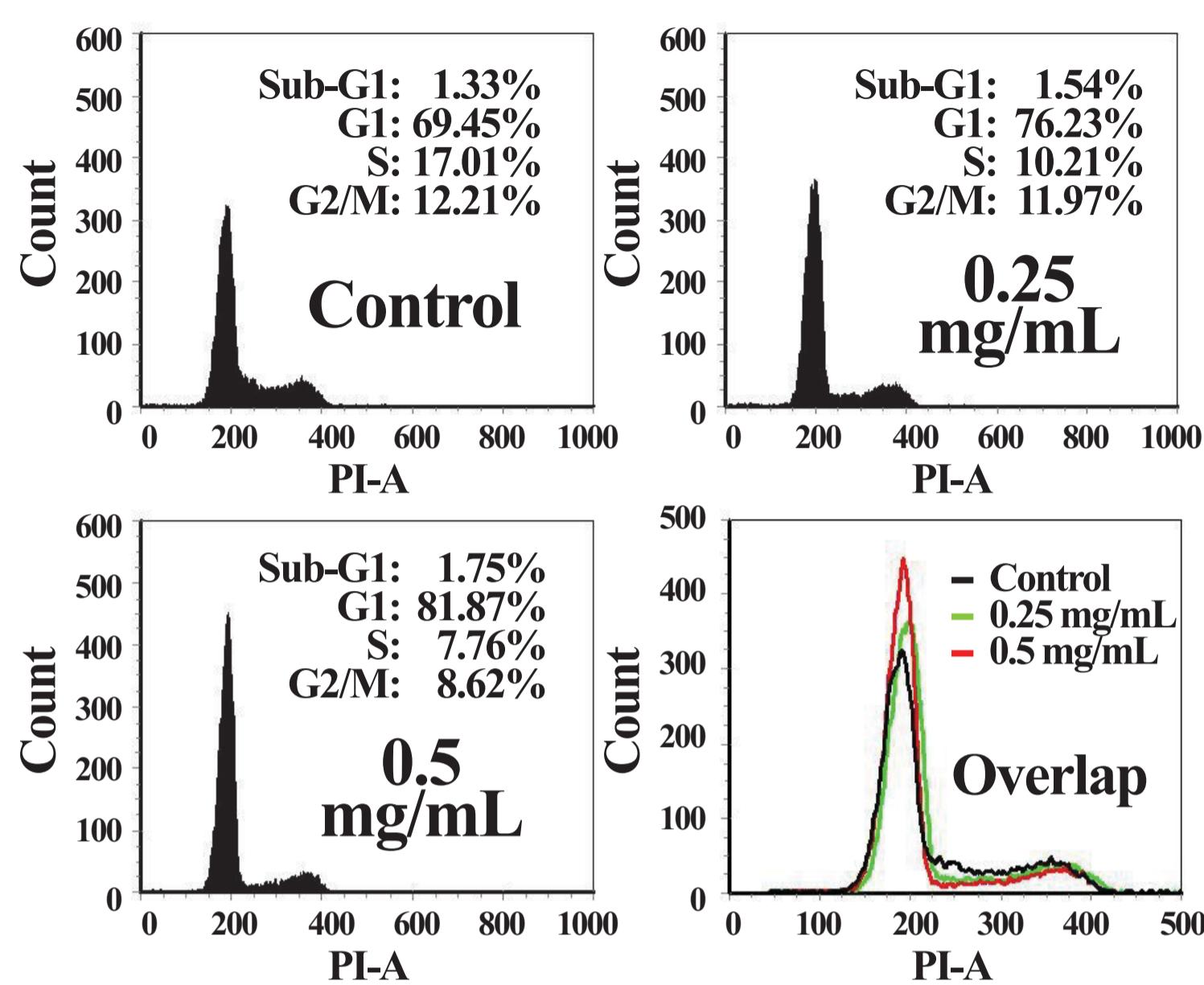
B



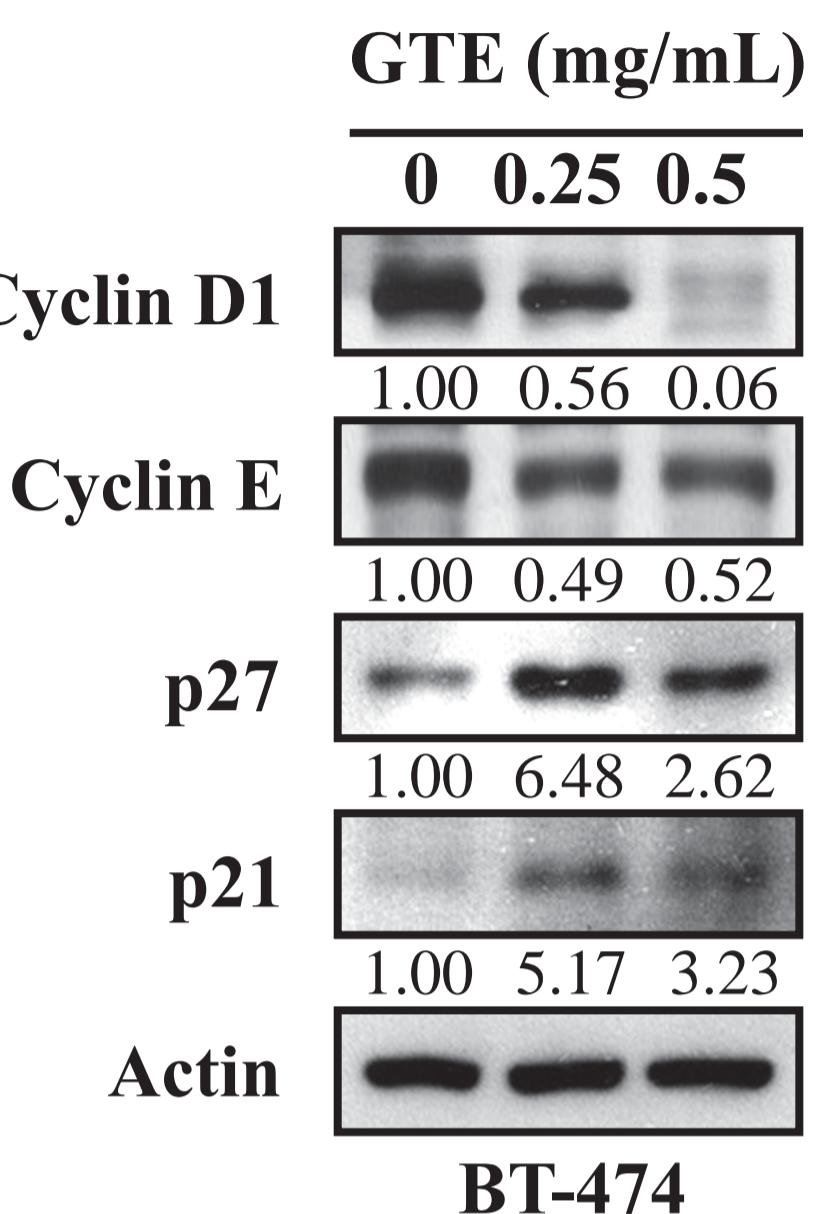
**Supplementary Fig. S3:** GTE sensitizes the anticancer effects taxol and cisplatin on HER2-overexpressing cancer cells. MDA-MB-435/HER2 cells were treated with various concentration of taxol (A) or cisplatin (B) with or without GTE (0.25 mg/mL) for 72 h. Cell proliferation was determined by MTT assay.

## Supplementary Fig. S4

A



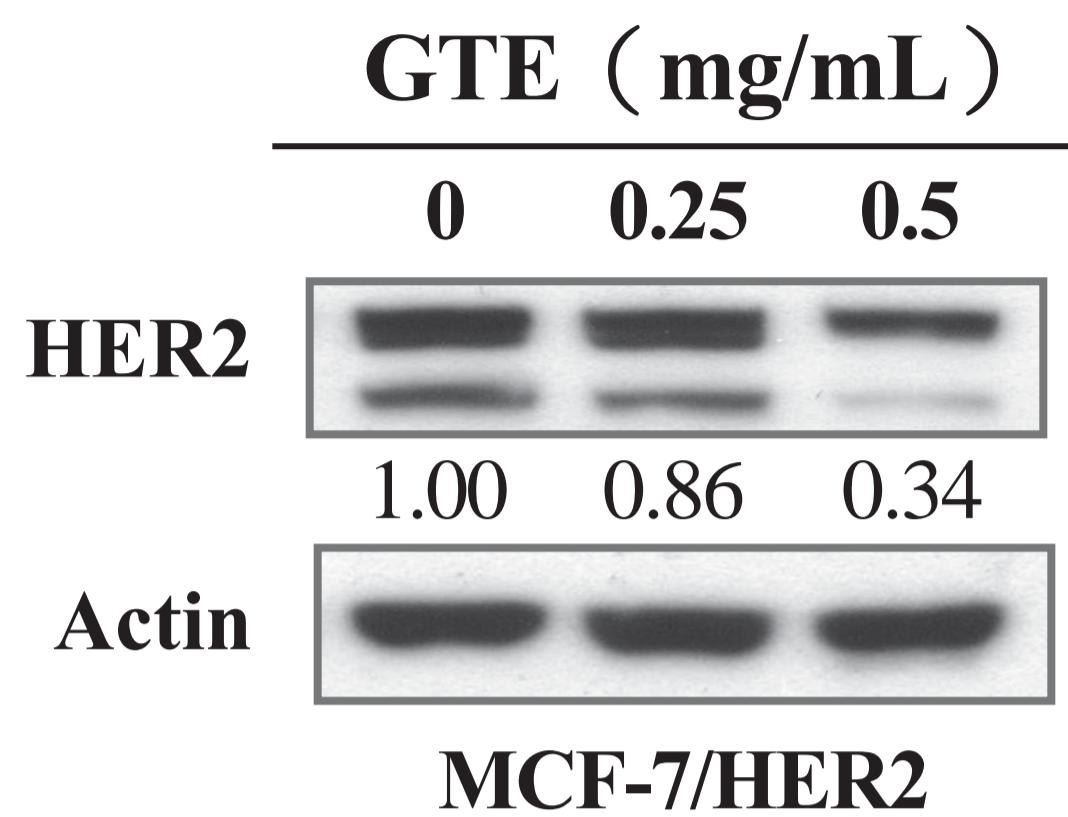
B



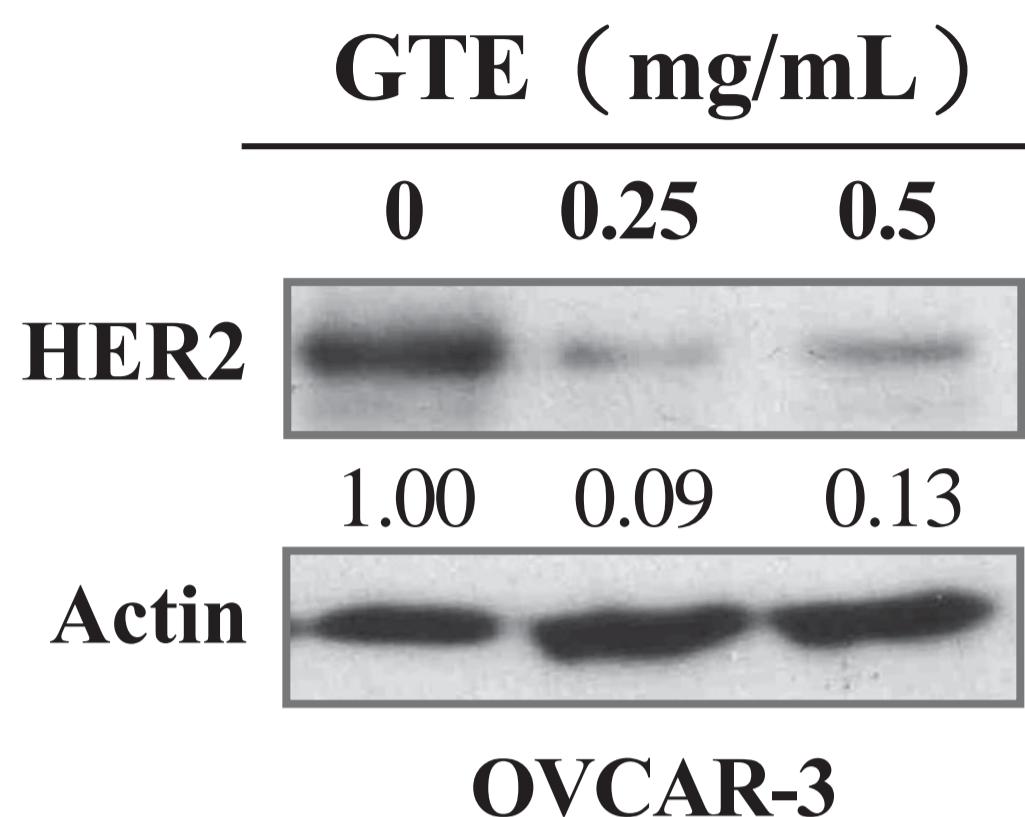
**Supplementary Fig. S4:** Effect of GTE on cell cycle of HER2-overexpressing cancer cells. BT-474 cells were treated with GTE (0.25 or 0.5 mg/mL) for 24 h. Distribution of cell cycle phases (A) and expression of cell cycle regulators (B) were analyzed by flow cytometry and Western blotting, respectively.

## Supplementary Fig. S5

**A**

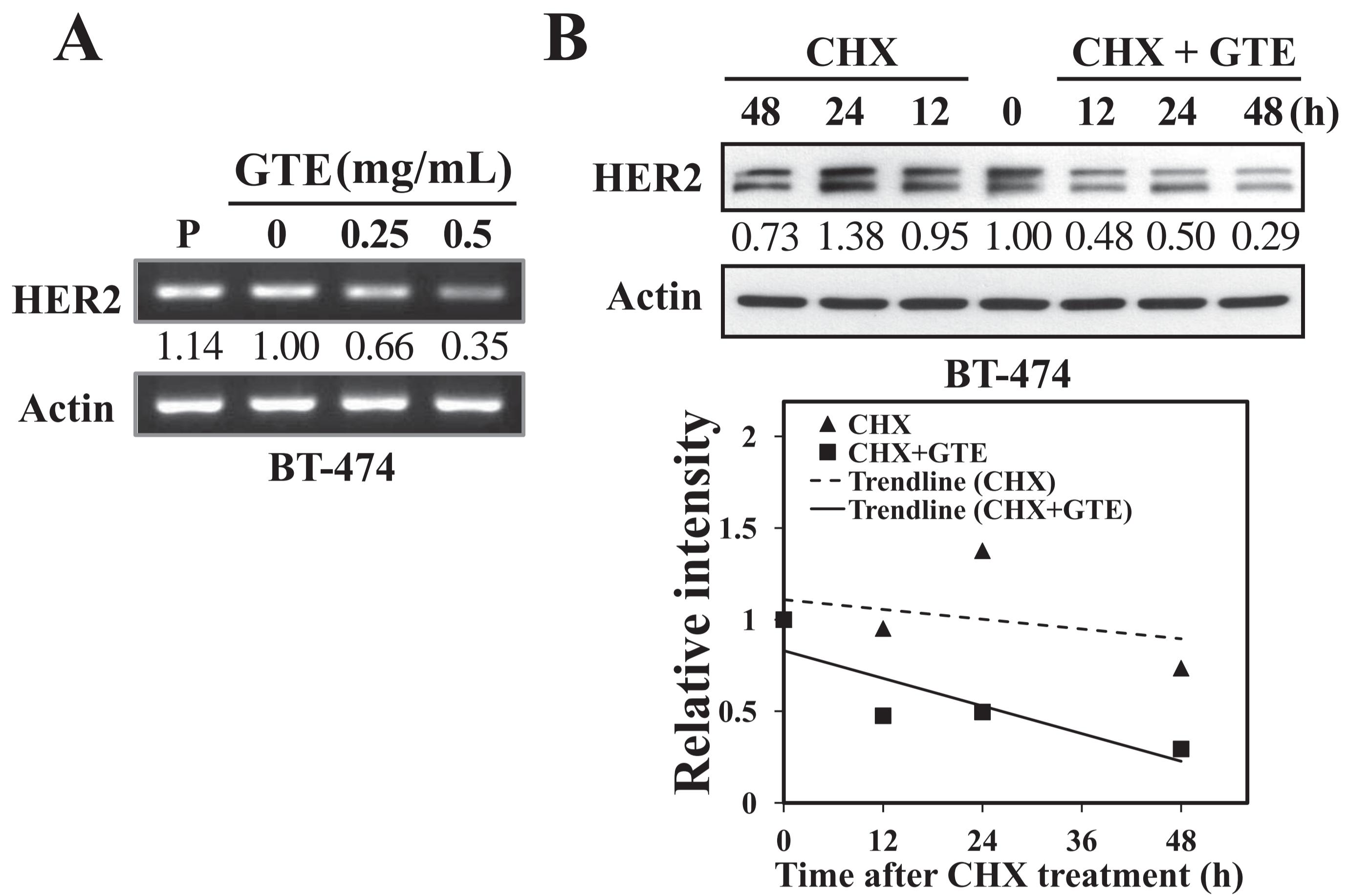


**B**



**Supplementary Fig. S5:** Effect of GTE on the expression of HER2 protein. MCF-7/HER2 ( $\text{HER2}^{\text{high}}$ ) (A) and OVCAR-3 ( $\text{HER2}^{\text{low}}$ ) (B) cells were treated with GTE (0.25 or 0.5 mg/mL) for 24 h. The protein expression of HER2 was measured by Western blotting.

## Supplementary Fig. S6



**Supplementary Fig. S6:** Effect of GTE on the expression of HER2 mRNA and the stability of HER2 protein in BT-474 cells. (A) Cells were treated with or without GTE (0.25 or 0.5 mg/mL) for 24 h. The mRNA level of HER2 was measured by semiquantitative RT-PCR. (B) Cells were pretreated with 20  $\mu$ g/mL of cycloheximide (CHX) for 30 min and then treated with or without GTE (0.5 mg/mL) for 12, 24, and 48 h. HER2 stability was determined by measuring the protein's half-life. P, parental cells.