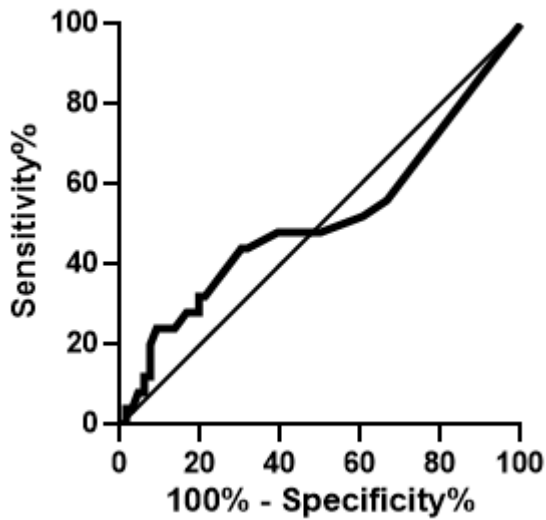


Supplementary Figure 1

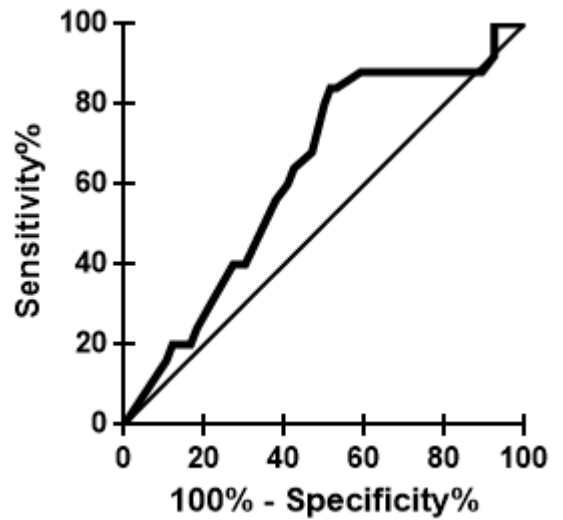
Immunohistochemical staining of EGFR, HER2, and PD-L1 in NSCLC tissues. Representative staining for (a) EGFR, (b) HER2, and (c) PD-L1 in tumor tissues ($\times 100$ magnification). The panels show images corresponding to different intensity scores of EGFR, HER2, and PD-L1 expression. (i, ii): low and (iii, iv): high. Bar: 50 μm .

a

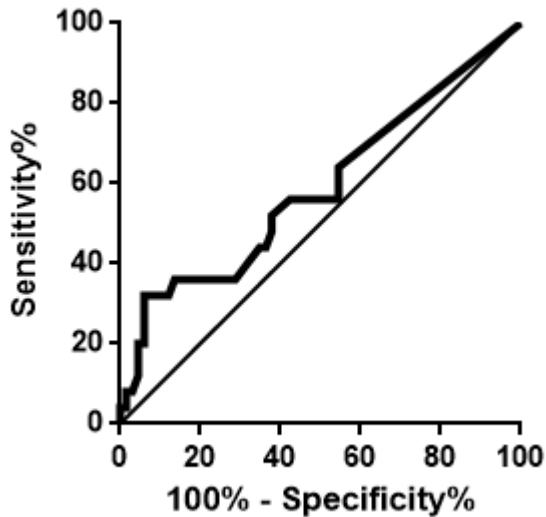
EGFR

**b**

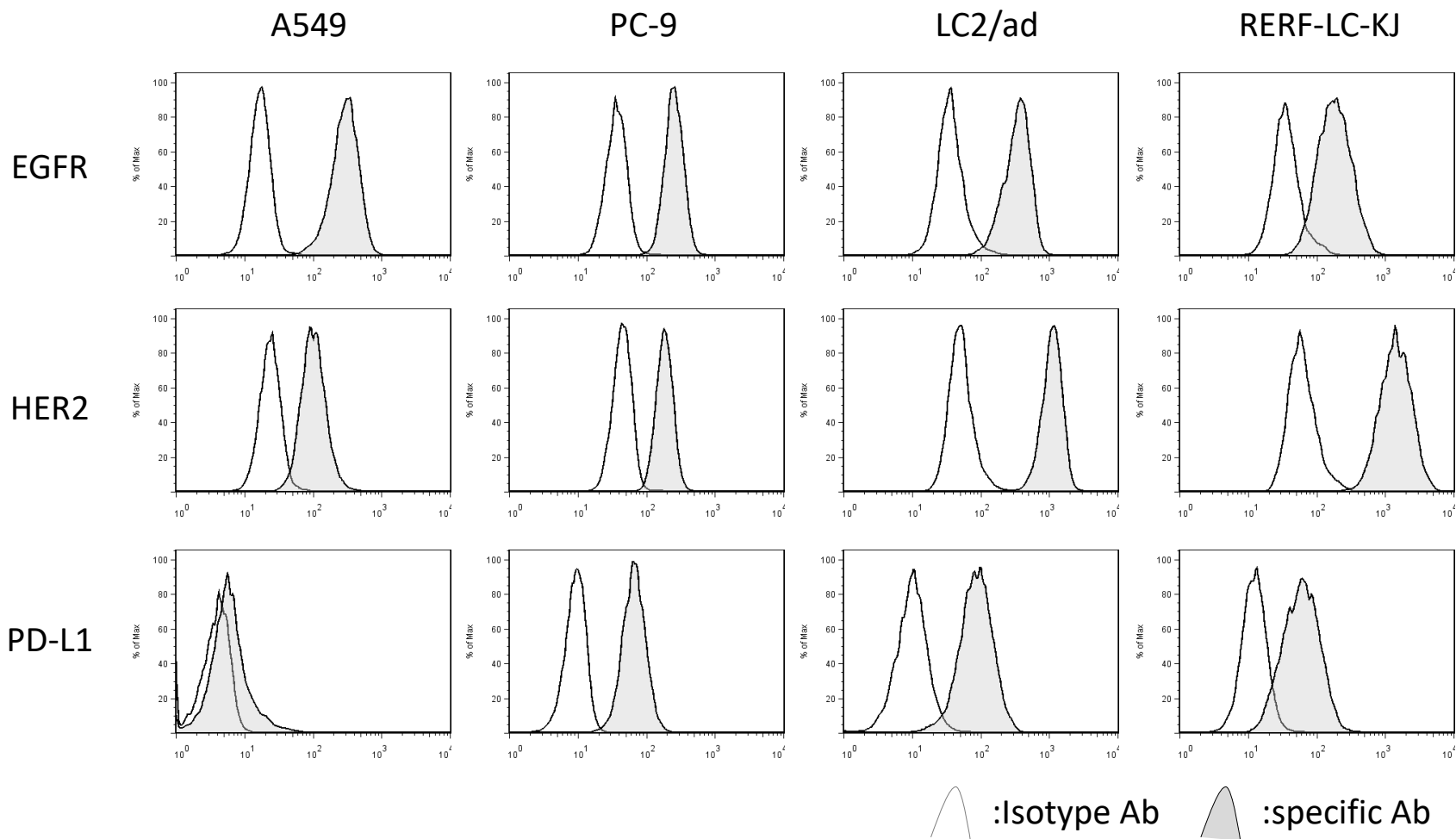
HER2



PD-L1

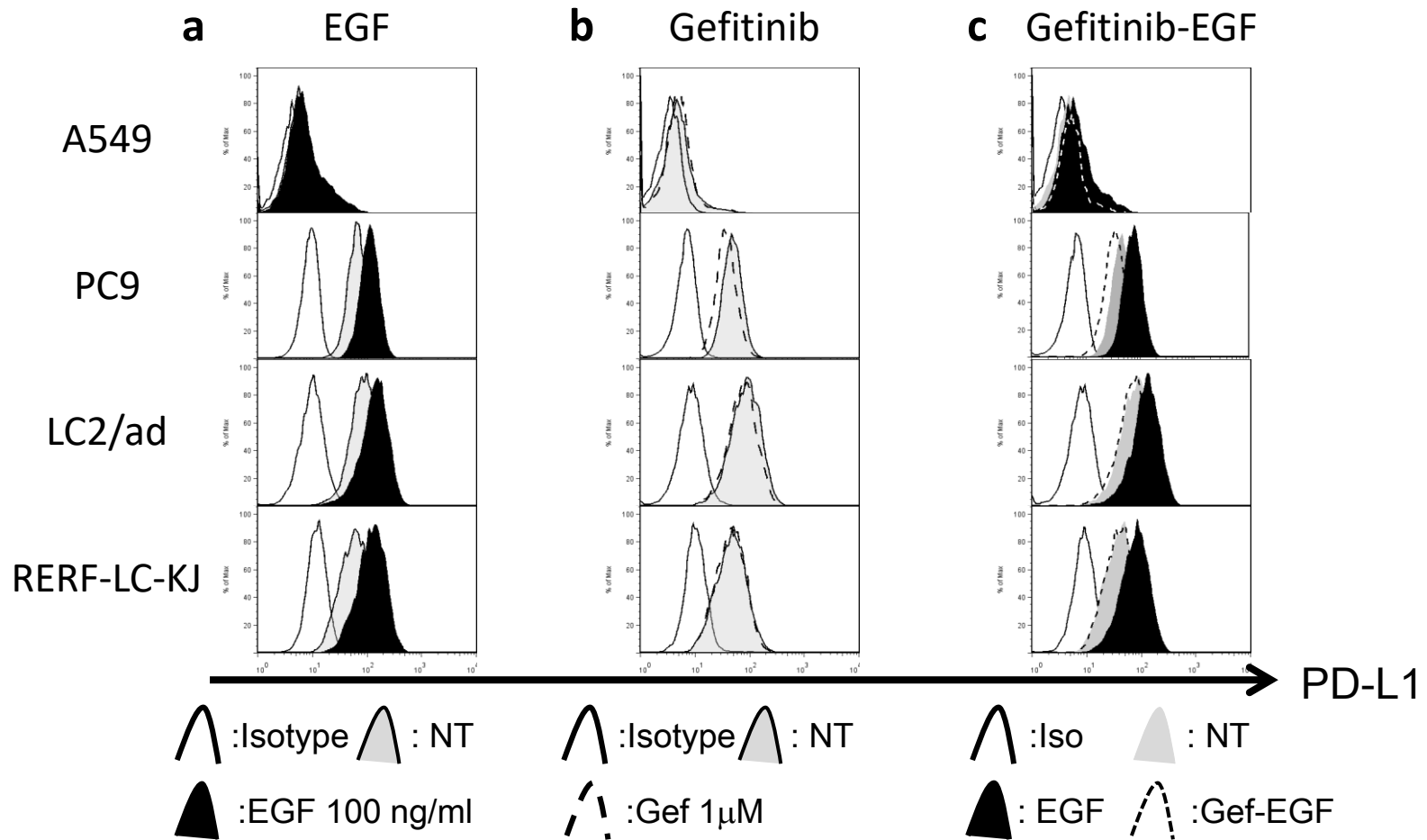
c**Supplementary Figure 2**

Receiver operating characteristics (ROC) curve for predicting recurrence free survival (RFS). RFS-EGFR: AUC 0.51 (95 % CI 0.37–0.66). RFS-HER2: AUC 0.63 (95 % CI 0.50–0.75). RFS-PD-L1: AUC 0.59 (95 % CI 0.45–0.73).



Supplementary Figure 3

Basal expression of EGFR, HER2, and PD-L1 in 4 NSCLC cell lines. The expression levels of each molecule were evaluated by flow cytometry.



Supplementary Figure 4. PD-L1 expression is upregulated by EGF, and EGF-induced PD-L1 is blocked by EGFR tyrosine kinase inhibitor gefitinib in NSCLC cell lines. (a) Four NSCLC cell lines were treated with 100 ng/mL of EGF or (b) 1 μM of gefitinib for 24 h, then the expression levels of PD-L1 were individually assessed using flow cytometry. (c) Four NSCLC cell lines were pretreated with 1 μM of gefitinib for 2 h followed by 100 ng/mL of EGF for 24 h, then the expression levels of PD-L1 were individually assessed using flow cytometry. Representative histograms from 3 independent experiments are shown.

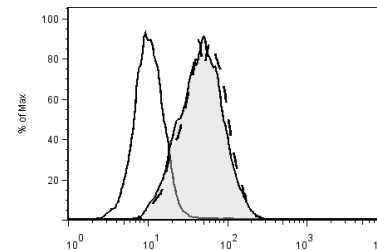
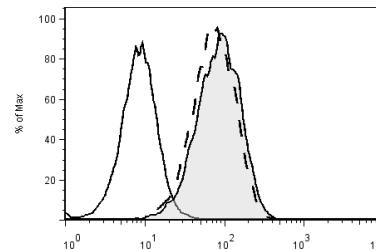
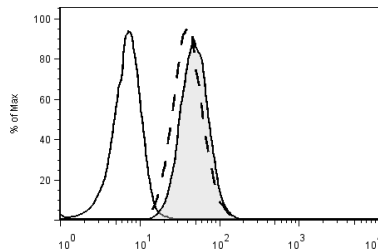
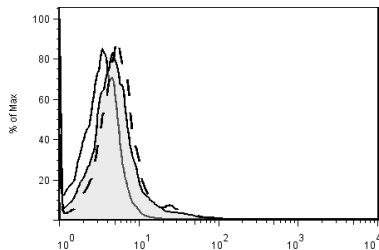
EGFR/HER2-TKI: Lapatinib

A549

PC9

LC2/ad

RERF-LC-KJ

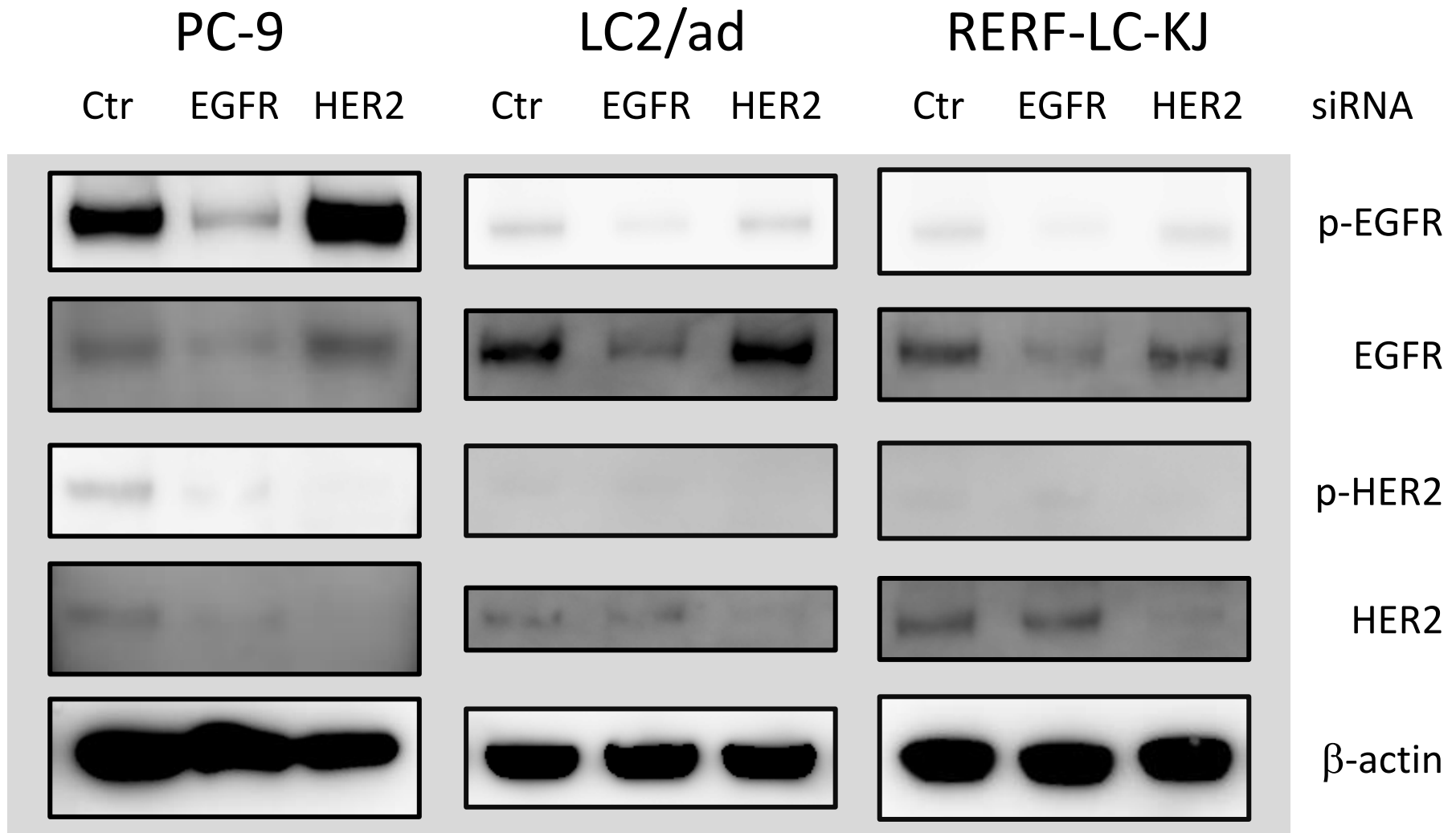


PD-L1

— : Isotype — : DMSO - - - : Lapatinib 1 μ M

Supplementary Figure 5

Expression of PD-L1 in NSCLC cells treated with EGFR/HER2 dual tyrosine kinase inhibitor lapatinib. Four NSCLC cell lines were treated with 1 μ M of lapatinib for 24 h, then the expression levels of PD-L1 were individually assessed using flow cytometry. Representative histograms from 3 independent experiments are shown.



Supplementary Figure 6

Immunoblotting assay to assess the efficacy of small interfering RNA assay in NSCLC cells. PD-L1 high-expressing PC-9, LC2/ad, and RERF-LC-KJ cells were transfected with EGFR, HER2, or control siRNA for 48 h. The expression levels of both receptors and β -actin were assessed using western blot analyses.