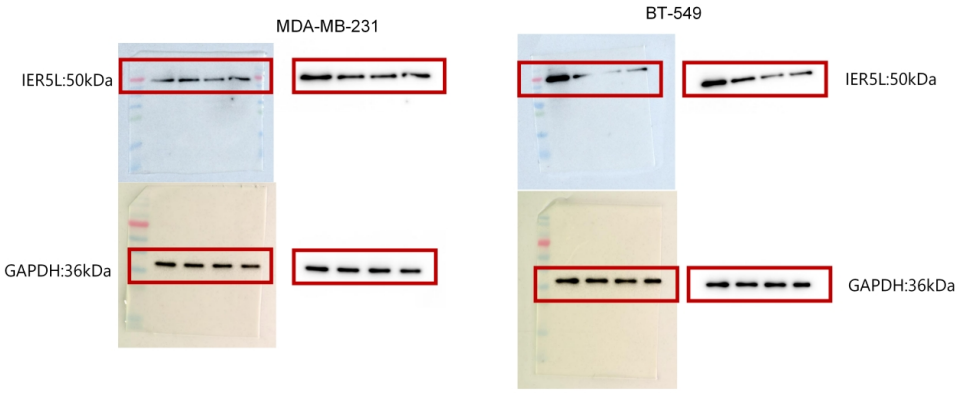
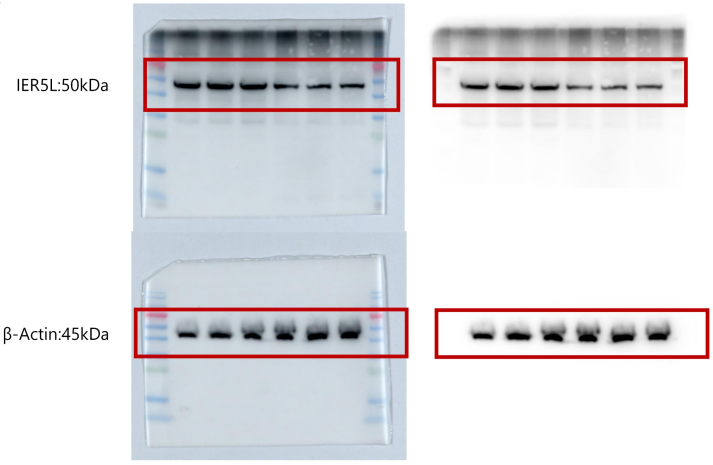
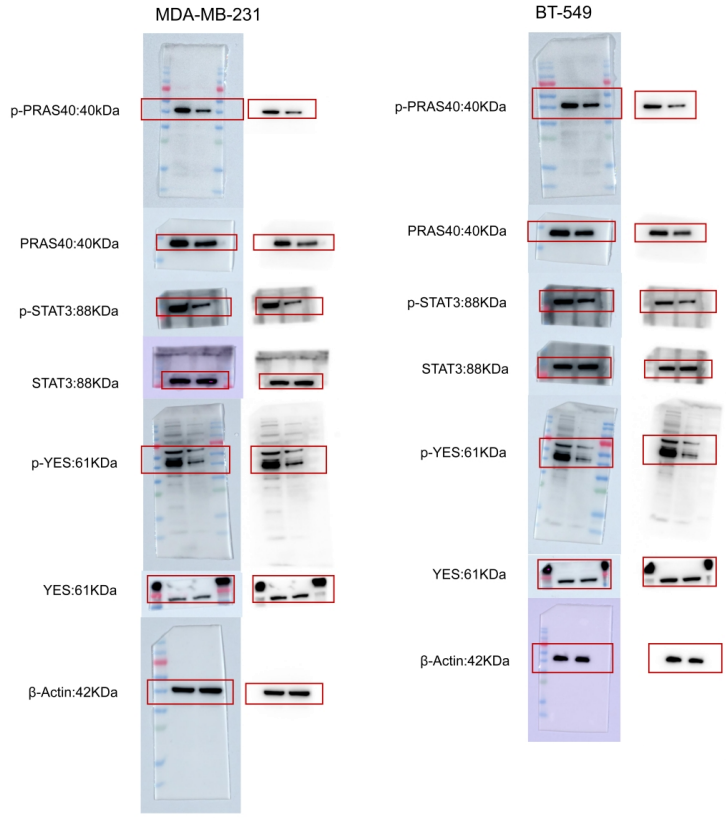
S1

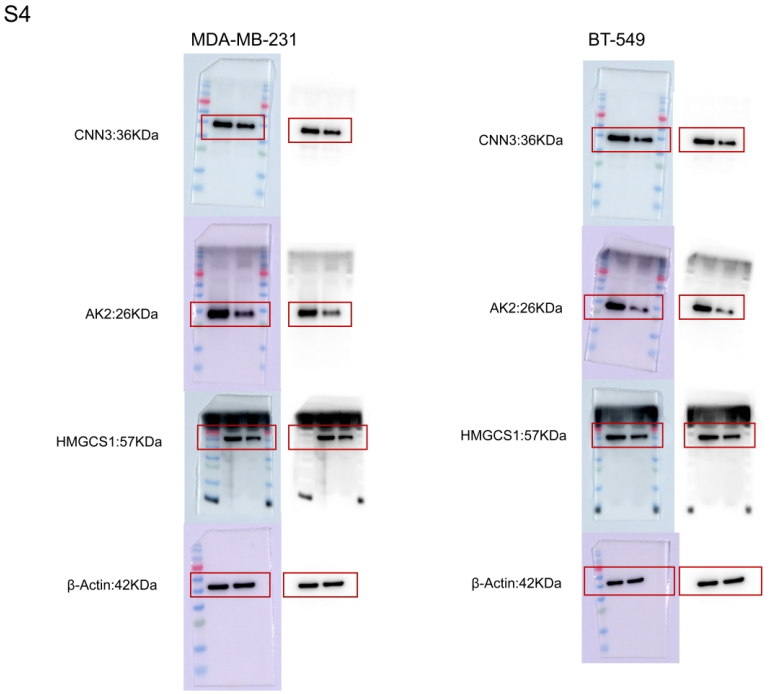

MDA-MB-231
BT-549
IER5L:50kDa
IER5L:50kDa
GAPDH:36kDa
GAPDH:36kDa

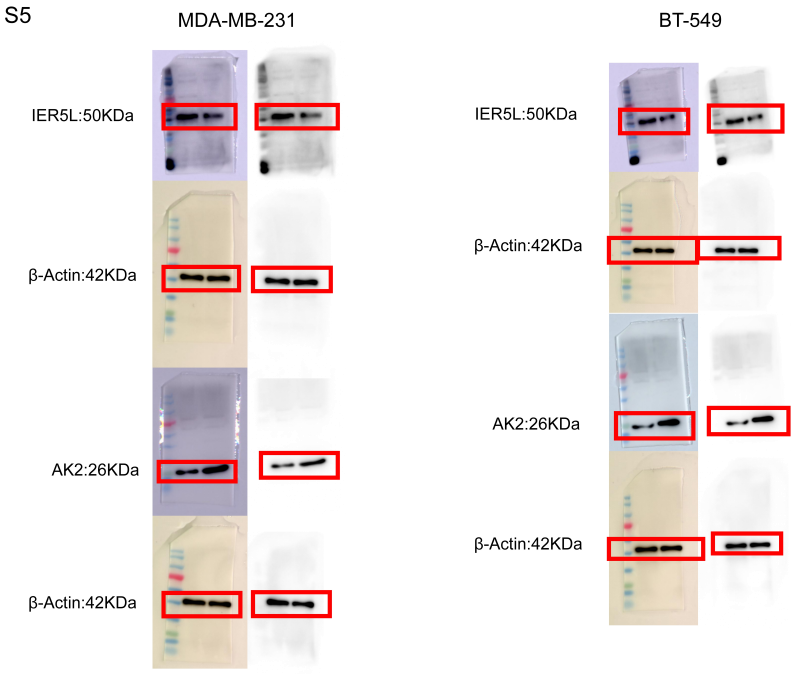
S2


IER5L:50kDa
β-Actin:45kDa

S3


MDA-MB-231
BT-549
p-PRAS40:40kDa
p-PRAS40:40KDa
PRAS40:40KDa
PRAS40:40KDa
p-STAT3:88KDa
p-STAT3:88KDa
STAT3:88KDa
STAT3:88KDa
p-YES:61KDa
p-YES:61KDa
YES:61KDa
YES:61KDa
β-Actin:42KDa
β-Actin:42KDa





Supplementary Figure S1. Full-length, uncropped western blot images corresponding to the cropped bands shown in Figure 2C. The bands presented in the main figure were derived from these original membranes.

Supplementary Figure S2. Full-length, uncropped western blot images corresponding to the cropped bands shown in Figure 2K. The bands presented in the main figure were derived from these original membranes.

Supplementary Figure S3. Full-length, uncropped western blot images corresponding to the cropped bands shown in Figure 3B. The bands presented in the main figure were derived from these original membranes.

Supplementary Figure S4. Full-length, uncropped western blot images corresponding to the cropped bands shown in Figure 3D. The bands presented in the main figure were derived from these original membranes.

Supplementary Figure S5. Full-length, uncropped western blot images corresponding to the cropped bands shown in Figure 3E. The bands presented in the main figure were derived from these original membranes.

Explanation of Western blot image acquisition and presentation： During Western blot image acquisition, two sets of images were generated. Cropped images without molecular weight markers were obtained from folders corresponding to standard chemiluminescent exposures optimized for signal detection. Images containing molecular weight markers (M) were acquired separately, as visualization of the markers required an additional exposure setting on the chemiluminescence imaging system (GE Amersham Imager 600).Due to technical limitations of the imaging system, molecular weight markers and target protein signals could not be optimally captured within the same exposure. Although exposure conditions were kept as consistent as possible, minor differences in signal intensity between cropped blots and marker-containing blots may be observed. These differences reflect variations in exposure timing rather than experimental inconsistency or data manipulation.

Importantly, the bands shown in the main figures and the corresponding Supplementary Information derive from the same membranes and represent the same experimental samples. The overall band patterns and relative signal changes are consistent across images, supporting the validity of the presented results.