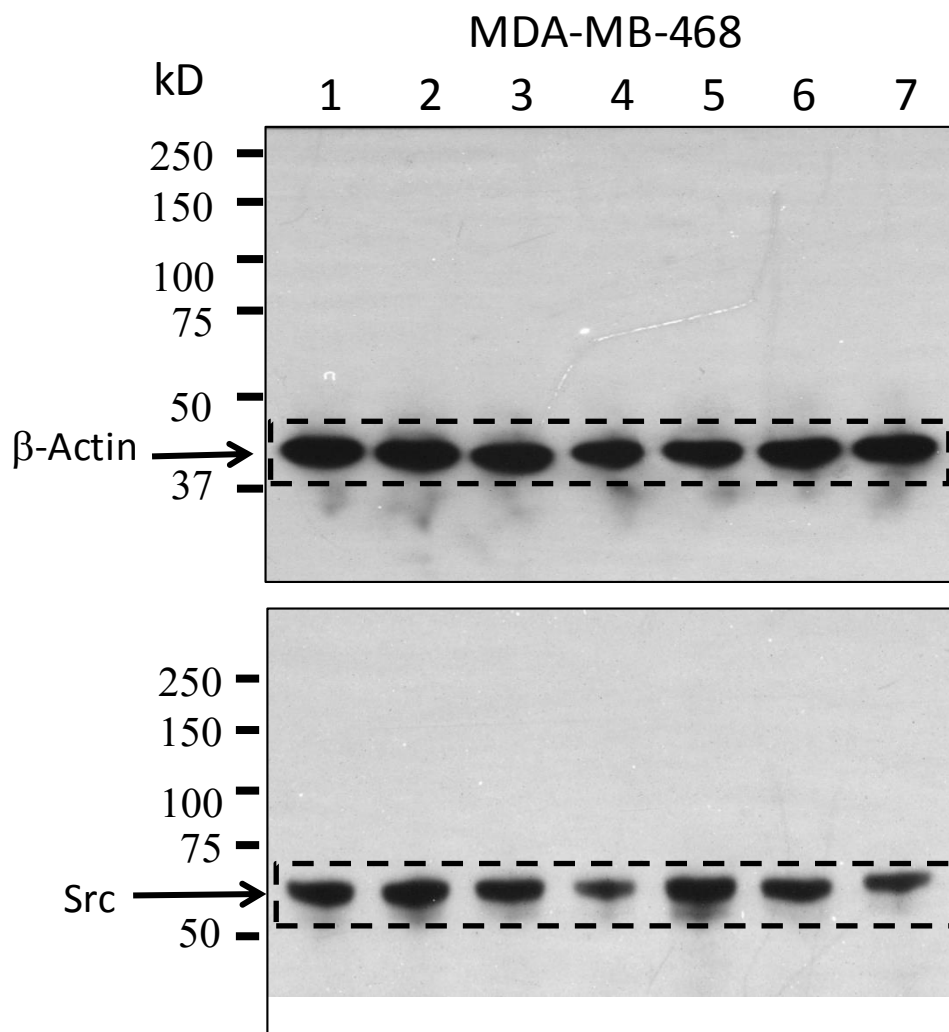
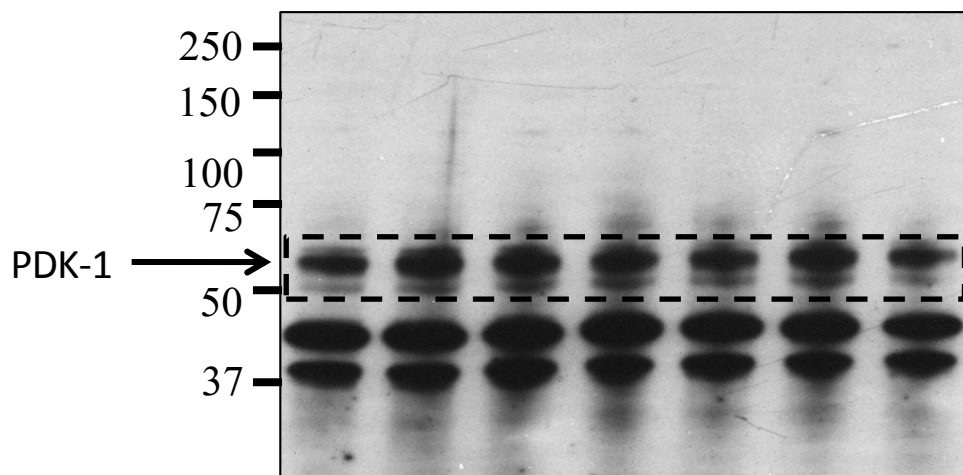
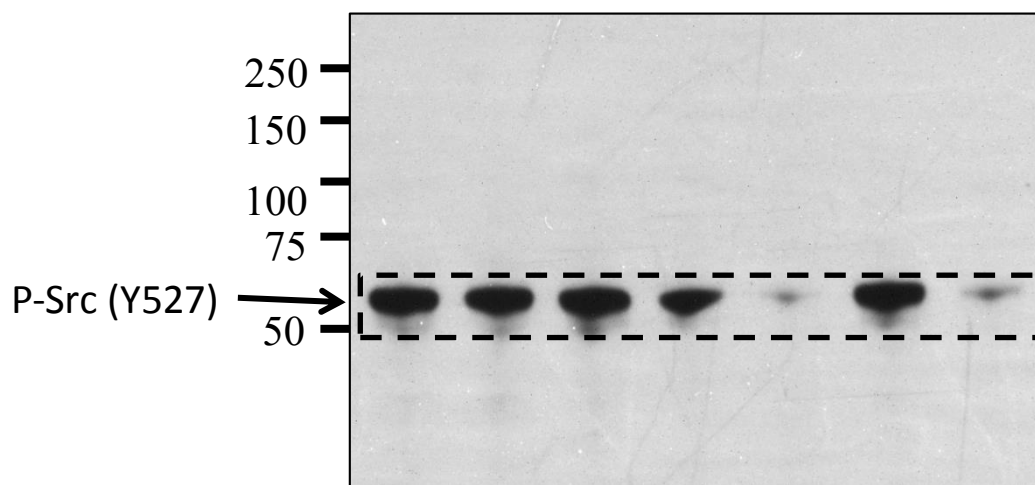
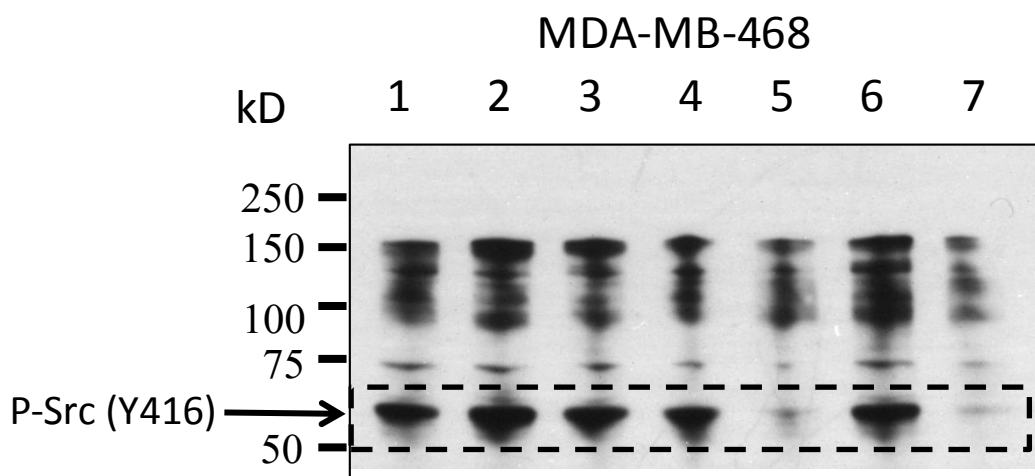


Fig. S1. Full pictures of Western blot analyses of selected kinase inhibitors on MDA-MB-468 and MDA-MB-231 cell line signaling. These are the full pictures of the Western blot results used to generate Fig. 6. The cell line and treatments were shown above the pictures. 1, Control; 2, Lapatinib; 3, GSK690693; 4, Lapatinib+GSK690693; 5, Dasatinib; 6, AZD-6244; 7, Dasatinib+AZD-6244. The concentrations of the drugs and treatment conditions are described in the main paper. The borders for cropping the images to produce the images in Fig. 6 are indicated by the dashed lines.



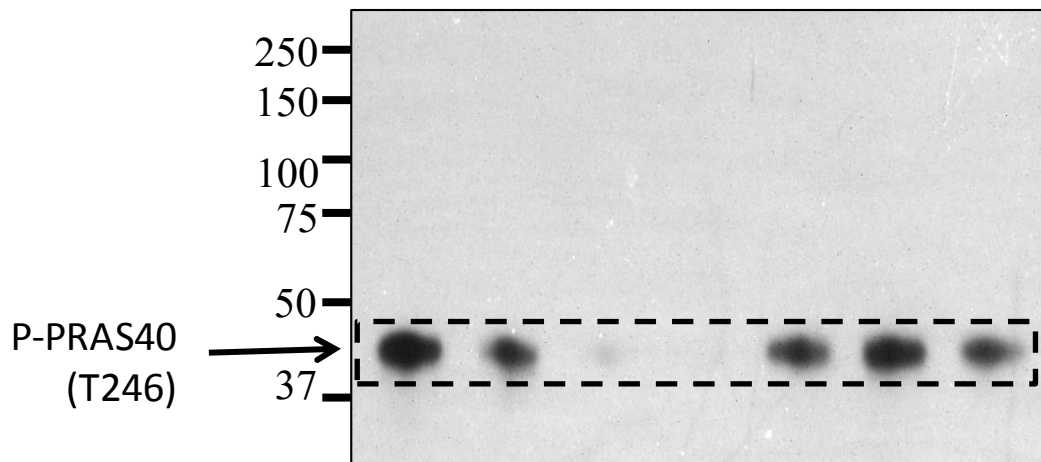
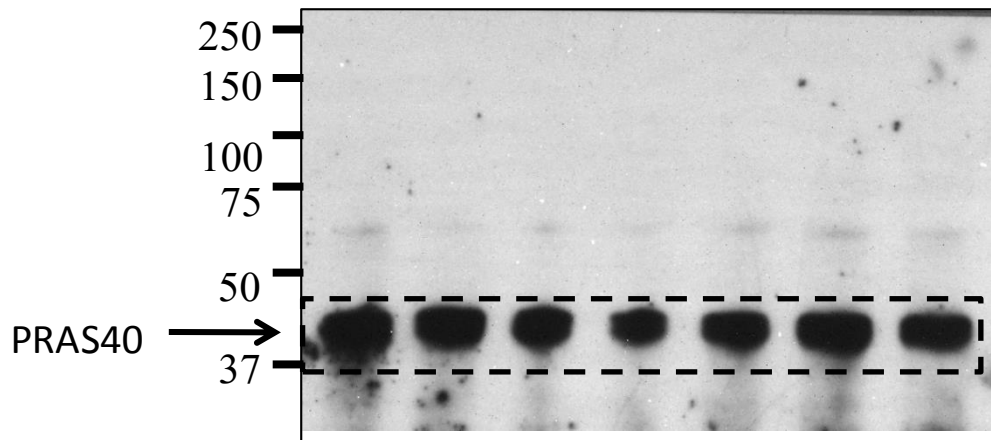
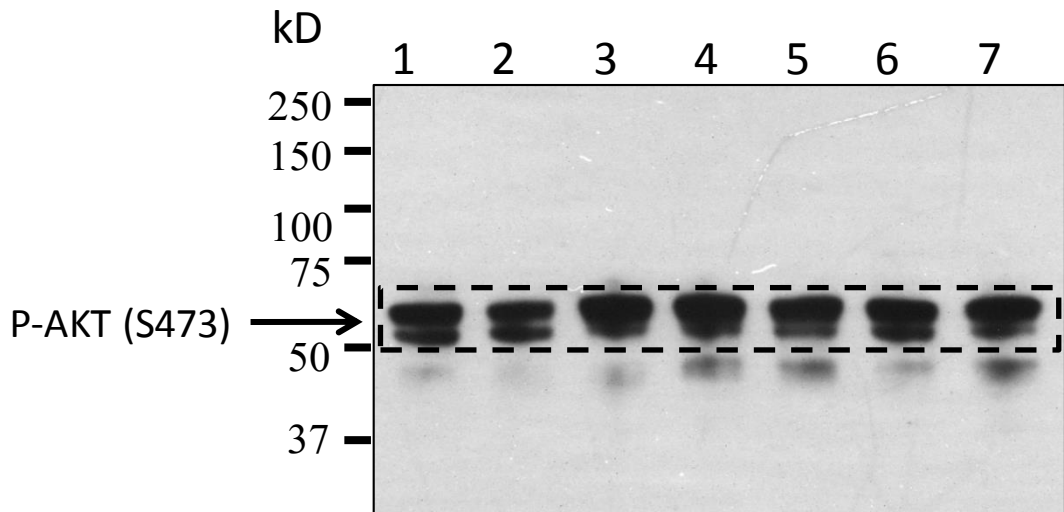


Western blot analysis showing protein levels across seven lanes (1-7). The blots are probed for P-PDK-I (S241), AKT, and P-AKT (T308). Molecular weight markers (kD) are indicated on the left: 250, 150, 100, 75, 50, and 37. A dashed line is drawn across all blots at the 50 kD position.

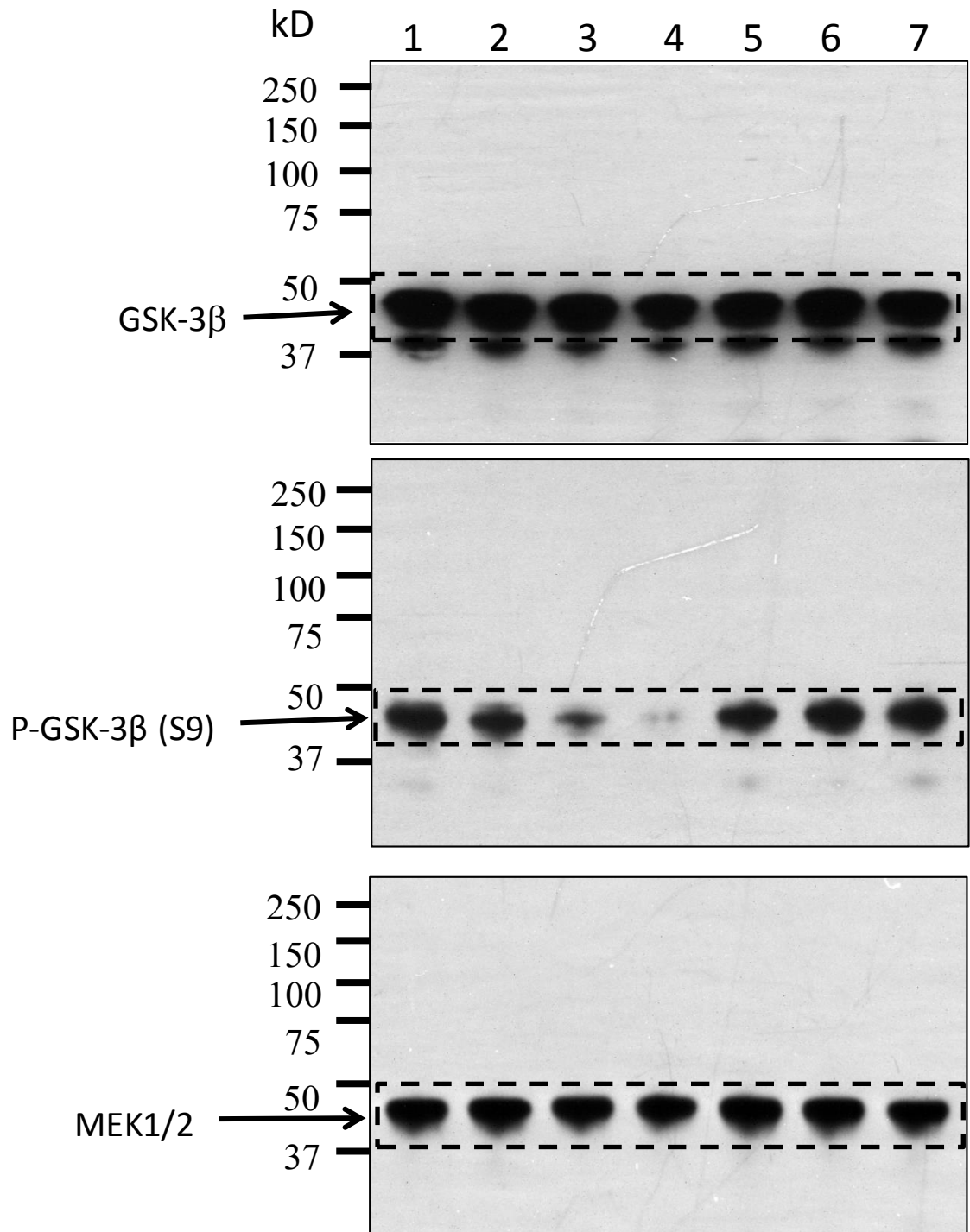
- P-PDK-I (S241):** Shows a strong band at approximately 50 kD in all lanes (1-7).
- AKT:** Shows a strong band at approximately 50 kD in all lanes (1-7).
- P-AKT (T308):** Shows a strong band at approximately 50 kD in all lanes (1-7).

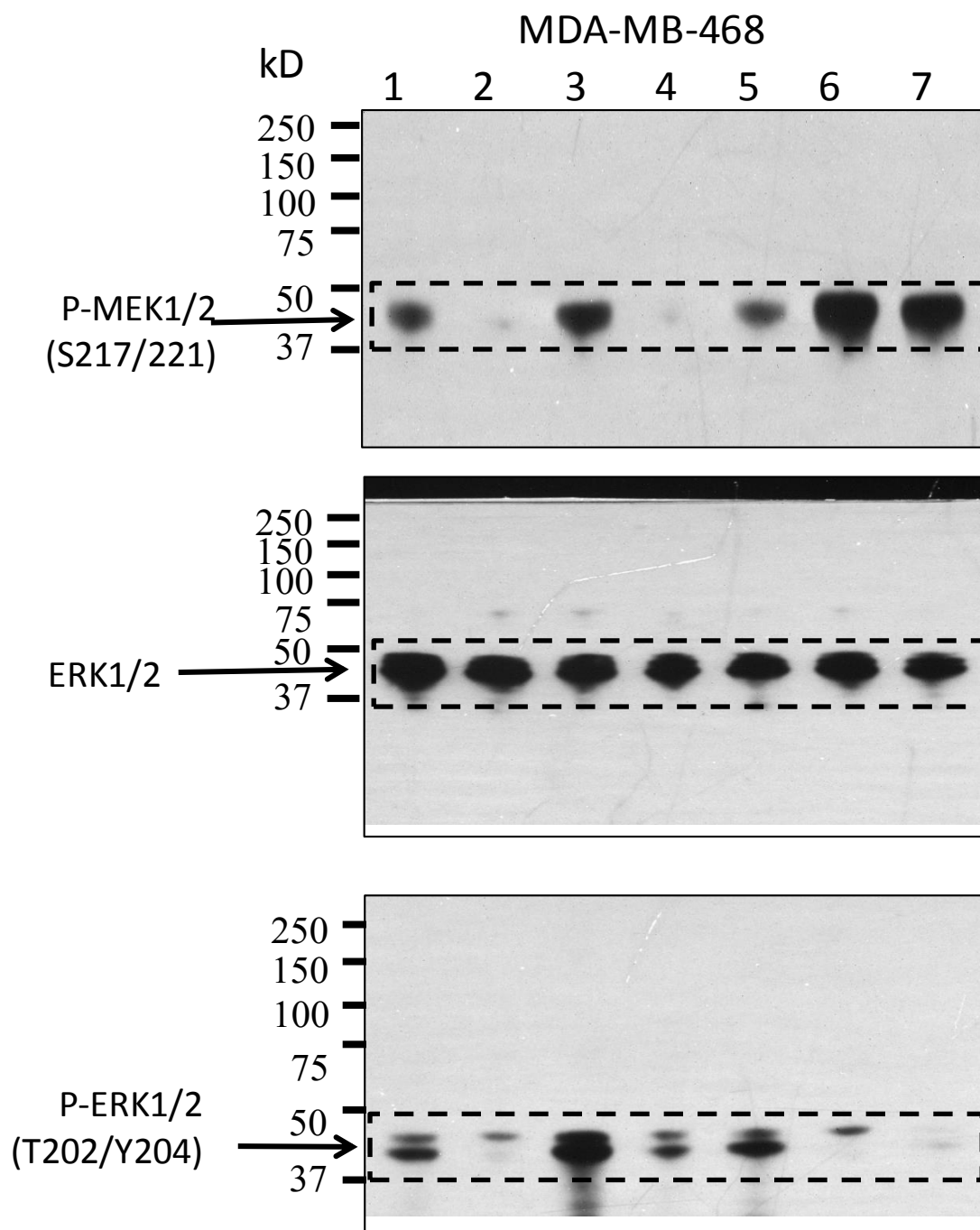
P-AKT (T308)

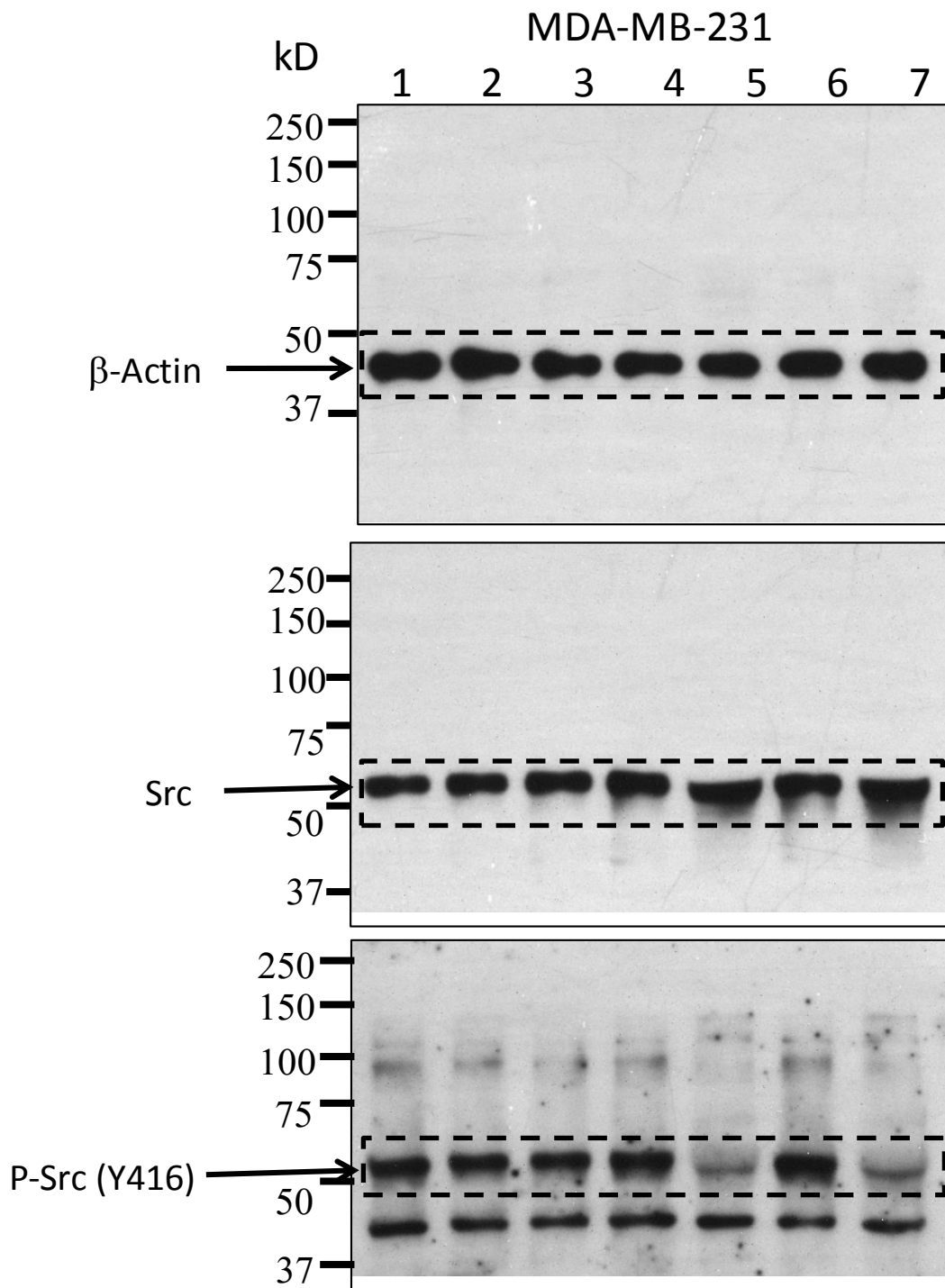
MDA-MB-468

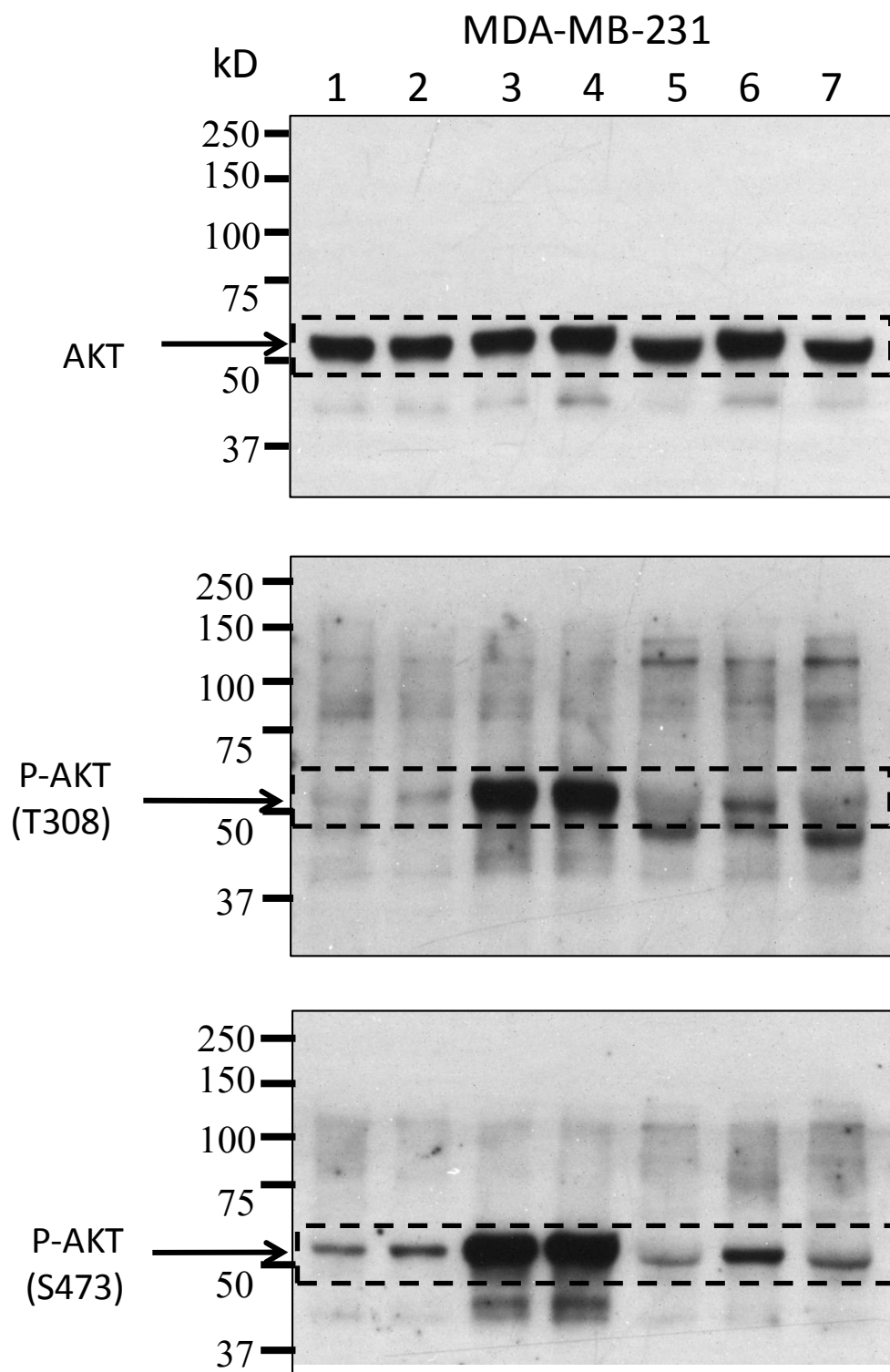


MDA-MB-468

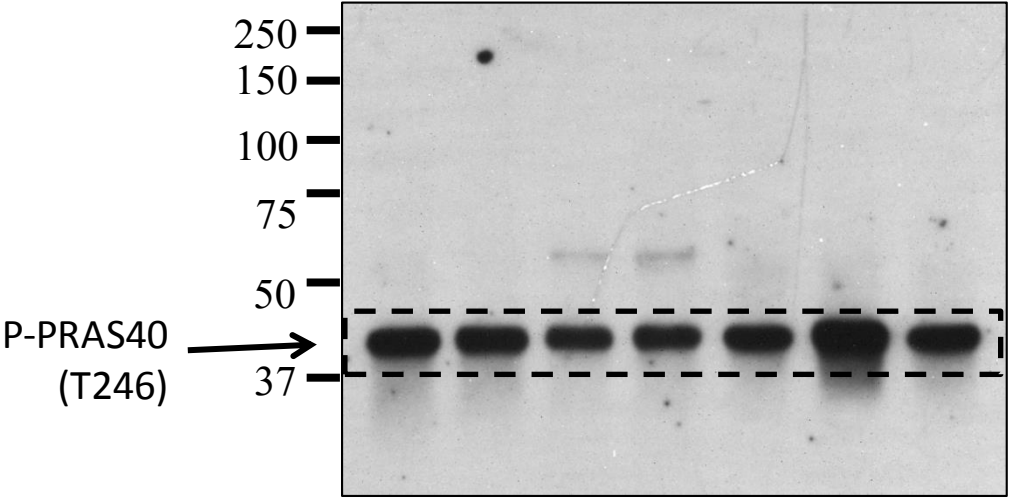
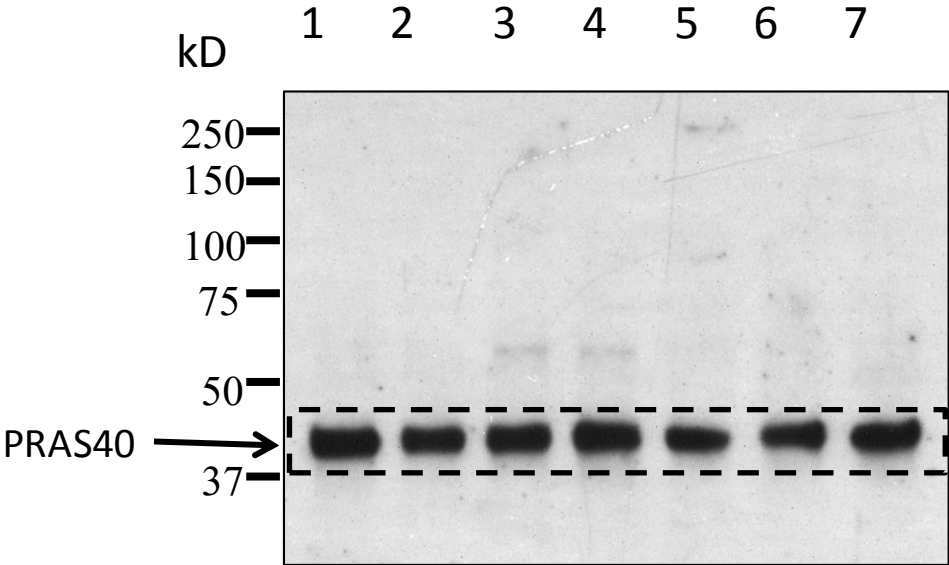


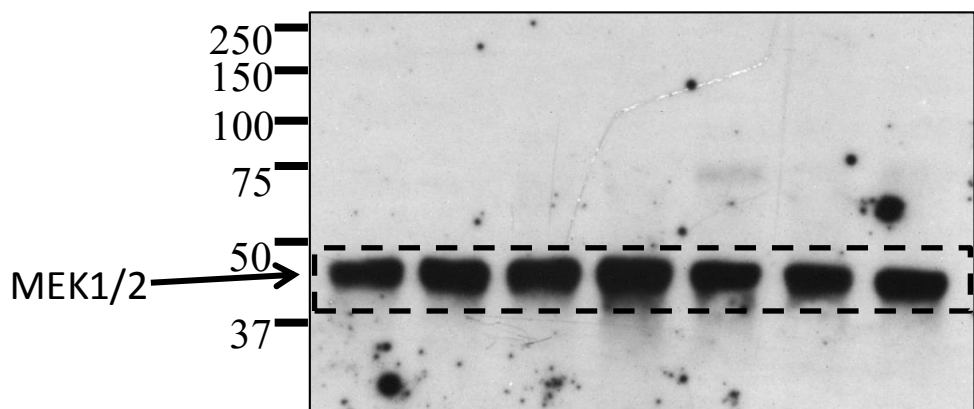
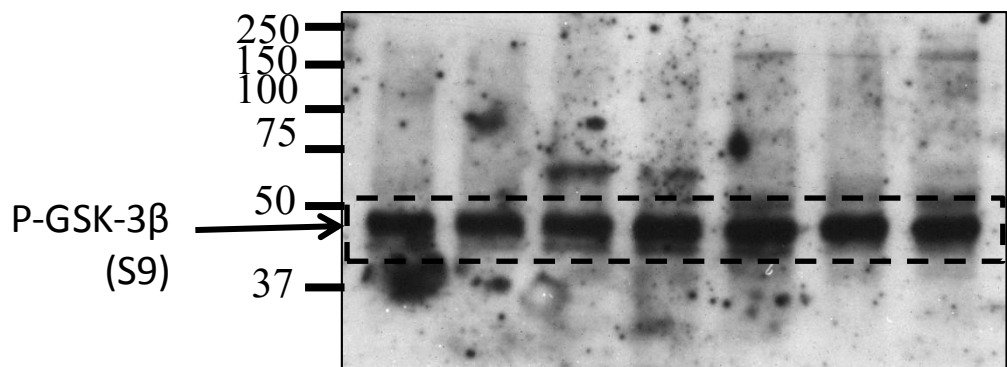
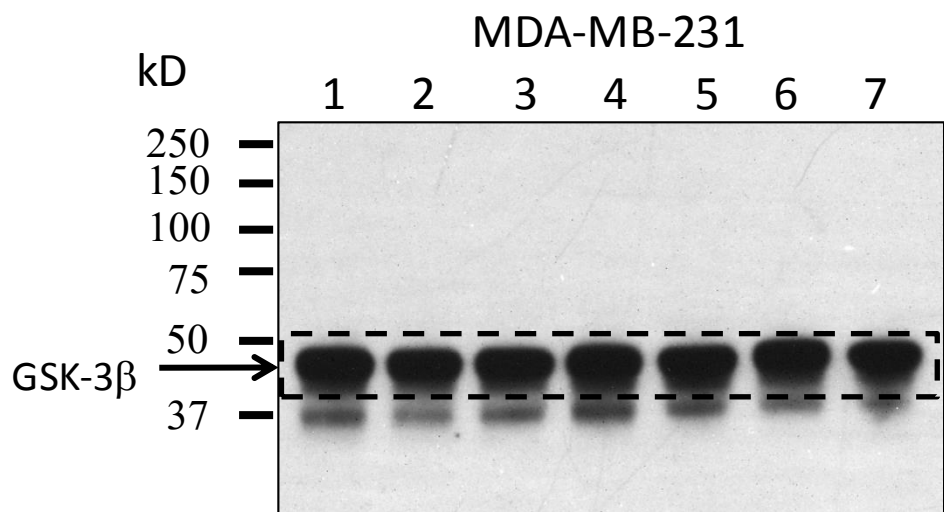






MDA-MB-231





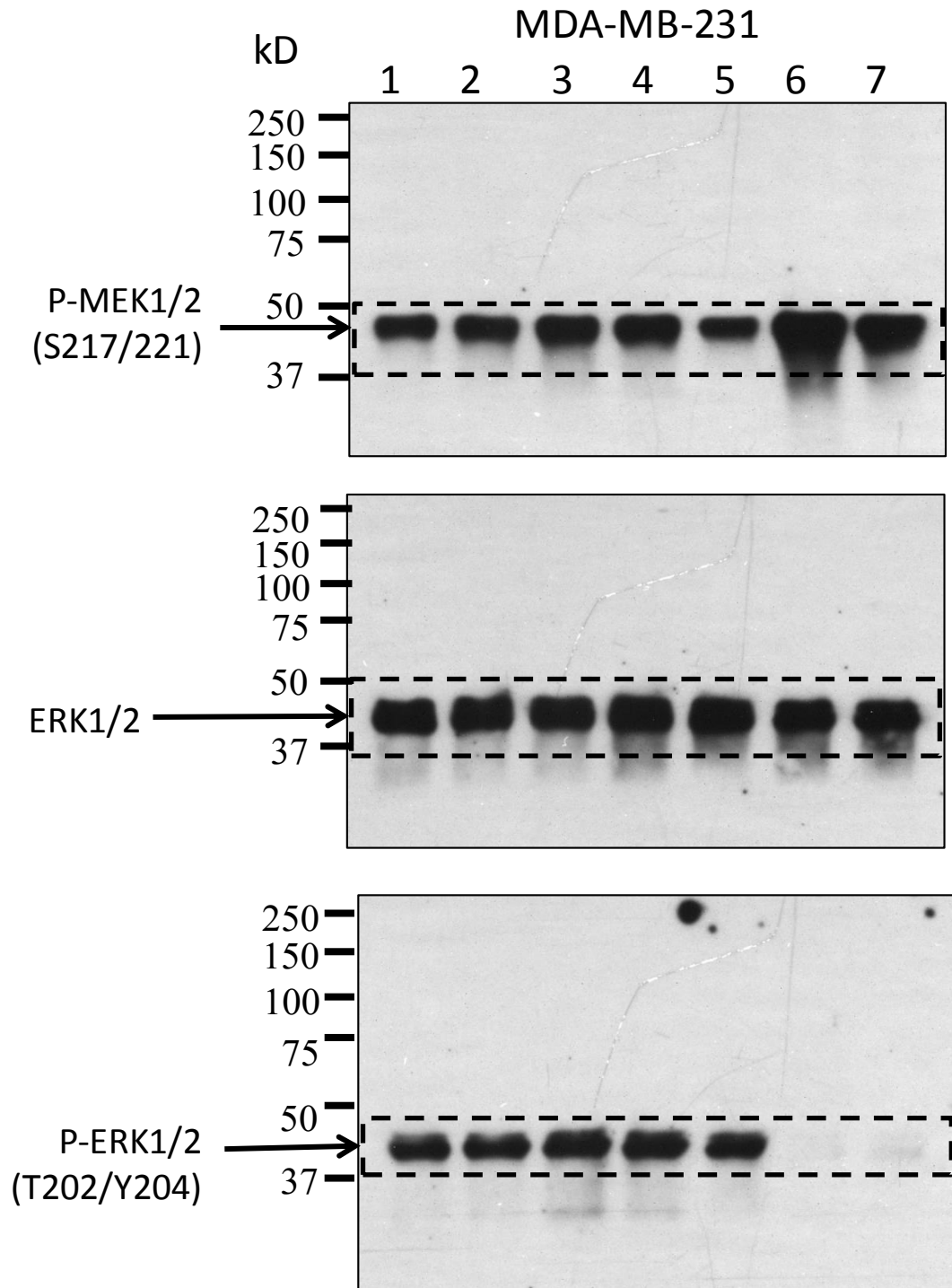


Table S1. Densitometry analyses of the band density presented in Fig. 6. The densities of appropriate bands in Fig. 6 were analyzed using the ImageJ software. For each protein, the seven bands for all treatments were analyzed using the same analysis box containing the whole band. The densities were compared to the control (no drug treatment) and normalized to the loading control, β -actin. The intensity of the phosphorylated protein bands were also normalized to the level of the same protein. The numbers above 2, suggestive of strong stimulation, are labeled green, and the numbers below 0.5, suggestive of strong inhibition, are labeled red.

MDA-MB-468 (normalized to Control and β -actin)							
	Control	Lapatinib	GSK690693	Lapa+GSK	Dasatinib	AZD-6244	Dasa+AZD
β -Actin	1	1	1	1	1	1	1
Src	1	1.05	1.00	0.81	1.32	0.99	0.82
pSrc-416	1	1.17	0.97	1.00	0.42	1.17	0.28
pSrc-527	1	0.89	1.01	0.91	0.39	1.06	0.39
PKD1	1	1.10	1.20	1.41	1.33	1.23	1.00
pPKD1	1	0.85	0.87	0.79	0.89	0.90	0.84
Akt	1	1.01	1.01	1.03	1.11	1.03	0.99
pAkt-T308	1	0.55	1.45	1.57	1.05	1.09	1.02
pAkt-S473	1	0.85	1.01	1.17	1.07	0.98	1.00
PRAS40	1	0.83	0.70	0.72	0.86	0.90	0.83
pPRAS40	1	0.59	0.21	0.21	0.79	0.88	0.62
GSK-3 β	1	0.92	0.95	1.00	1.06	1.00	0.94
pGSK-3 β	1	0.80	0.54	0.35	0.99	0.97	1.02
Mek1/2	1	0.96	0.97	1.08	1.21	1.05	1.02
pMek1/2	1	0.44	1.31	0.55	1.00	1.98	1.88
Erk1/2	1	0.86	0.84	0.86	0.86	0.84	0.78
pErk1/2	1	0.42	1.64	0.84	1.28	0.44	0.29

MBA-MB-468 (normalized to protein level)							
	Control	Lapatinib	GSK690693	Lapa+GSK	Dasatinib	AZD-6244	Dasa+AZD
β -Actin							
Src		1	1	1	1	1	1
pSrc-416		1.12	0.97	1.23	0.32	1.18	0.35
pSrc-527		0.85	1.01	1.12	0.29	1.07	0.47
PKD1		1	1	1	1	1	1
pPKD1		0.77	0.73	0.56	0.67	0.73	0.84
Akt		1	1	1	1	1	1
pAkt-T308		0.55	1.44	1.53	0.95	1.06	1.03
pAkt-S473		0.84	1.01	1.14	0.96	0.95	1.02
PRAS40		1	1	1	1	1	1
pPRAS40		0.71	0.30	0.30	0.92	0.99	0.75
GSK-3b		1	1	1	1	1	1
pGSK-3b		0.86	0.57	0.35	0.93	0.97	1.09
Mek1/2		1	1	1	1	1	1
pMek1/2		0.46	1.36	0.51	0.83	1.88	1.84
Erk1/2		1	1	1	1	1	1
pErk1/2		0.49	1.95	0.98	1.49	0.52	0.37

MDA-MB-231 (normalized to Control and b-actin)							
	Control	Lapatinib	GSK690693	Lapa+GSK	Dasatinib	AZD-6244	Dasa+AZD
β-Actin	1	1	1	1	1	1	1
Src	1	1.09	1.35	1.56	1.75	1.59	1.51
pSrc-416	1	1.00	1.12	1.34	0.49	1.31	0.49
pSrc-527	1	1.05	1.31	1.51	0.43	1.37	0.59
PDK1	1	0.98	1.42	1.72	1.00	1.24	0.83
pPDK1	1	0.83	1.06	1.37	1.07	1.19	0.91
Akt	1	1.00	1.20	1.39	1.37	1.44	1.11
pAkt-T308	1	1.08	2.84	3.02	1.83	1.76	1.66
pAkt-S473	1	1.26	3.58	3.84	1.50	1.88	1.56
PRAS40	1	0.86	1.05	1.18	0.99	0.95	1.07
pPRAS40	1	1.03	0.96	1.04	1.21	1.51	1.14
GSK-3β	1	0.98	1.17	1.23	1.31	1.18	1.04
pGSK-3β	1	1.00	1.18	1.30	1.44	1.14	1.14
Mek1/2	1	1.18	1.35	1.59	1.42	1.23	1.21
pMek1/2	1	1.13	1.36	1.50	1.15	1.78	1.55
Erk1/2	1	1.03	1.16	1.35	1.41	1.20	1.20
pErk1/2	1	1.10	1.41	1.44	1.33	0.26	0.25

MDA-MB-231 (normalized to protein level)							
	Control	Lapatinib	GSK690693	Lapa+GSK	Dasatinib	AZD-6244	Dasa+AZD
b-Actin							
Src		1	1	1	1	1	1
pSrc-416		0.92	0.83	0.86	0.28	0.82	0.33
pSrc-527		0.96	0.97	0.97	0.25	0.86	0.39
PDK1		1	1	1	1	1	1
pPDK1	✓	0.85	✓ 0.75	✓ 0.80	✓ 1.07	✓ 0.96	✓ 1.09
Akt		1	1	1	1	1	1
pAkt-T308		1.08	2.37	2.18	1.34	1.22	1.50
pAkt-S473		1.26	2.99	2.77	1.10	1.30	1.40
PRAS40		1	1	1	1	1	1
pPRAS40	✓	1.19	✓ 0.92	✓ 0.88	✓ 1.22	✓ 1.59	✓ 1.07
GSK-3b		1	1	1	1	1	1
pGSK-3b	✓	1.02	✓ 1.01	✓ 1.06	✓ 1.10	✓ 0.97	✓ 1.09
Mek1/2		1	1	1	1	1	1
pMek1/2	✓	0.95	✓ 1.00	✓ 0.94	✓ 0.81	✓ 1.44	✓ 1.29
Erk1/2		1	1	1	1	1	1
pErk1/2		1.07	1.22	1.07	0.94	0.22	0.21