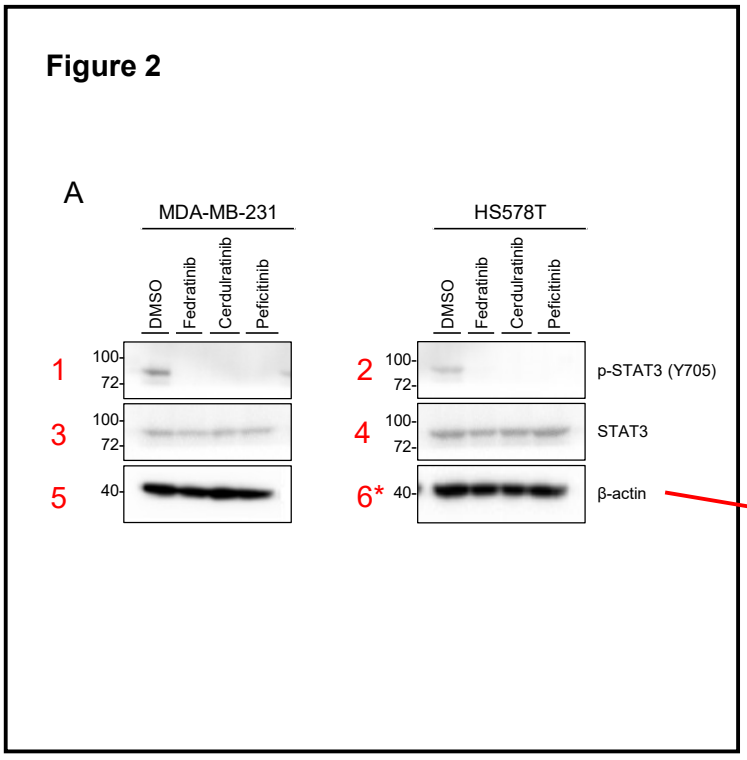
JAK2 inhibition augments the anti-proliferation effects by AKT and MEK inhibition in triple-negative breast cancer cells

Kyu Sic You [1,2,*], Tae-Sung Kim [1,2,*], Su Min Back [1], Jeong-Soo Park [1,2], Kangdong Liu [3,4], Yeon-Sun Seong [1,2], Dong Joon Kim [2,3,4,5,#] and Yong Weon Yi [1,2,#]

Original Blot Data Used in the Manuscript

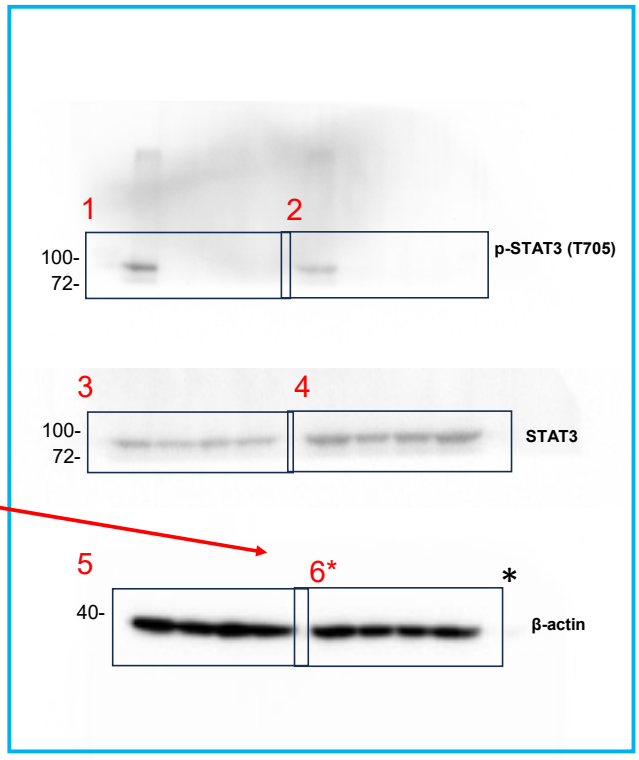
Example: Blot Presentation for Manuscript

Final Figures



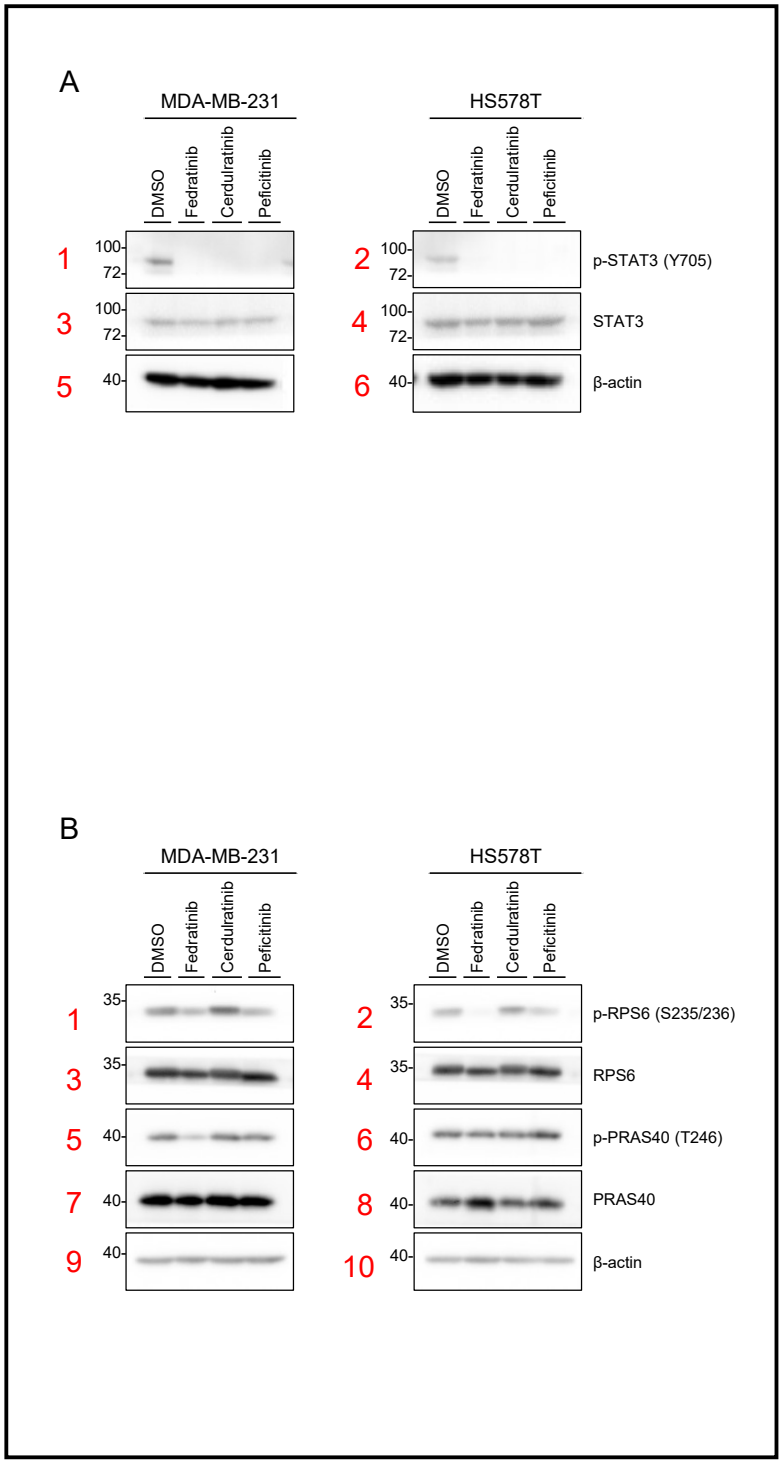
*Blot Identity (Red Numbers)

Original Uncropped Blot Images



*Cropped panels used in the final figure

Figure S2


A
MDA-MB-231
HS578T
DMSO
Fedratinib
Cerdulratinib
Peficitinib
1
2
3
4
5
6
100-
72-
40-
p-STAT3 (Y705)
STAT3
β-actin
B
MDA-MB-231
HS578T
DMSO
Fedratinib
Cerdulratinib
Peficitinib
1
2
3
4
5
6
7
8
9
10
35-
40-
p-RPS6 (S235/236)
RPS6
p-PRAS40 (T246)
PRAS40
β-actin

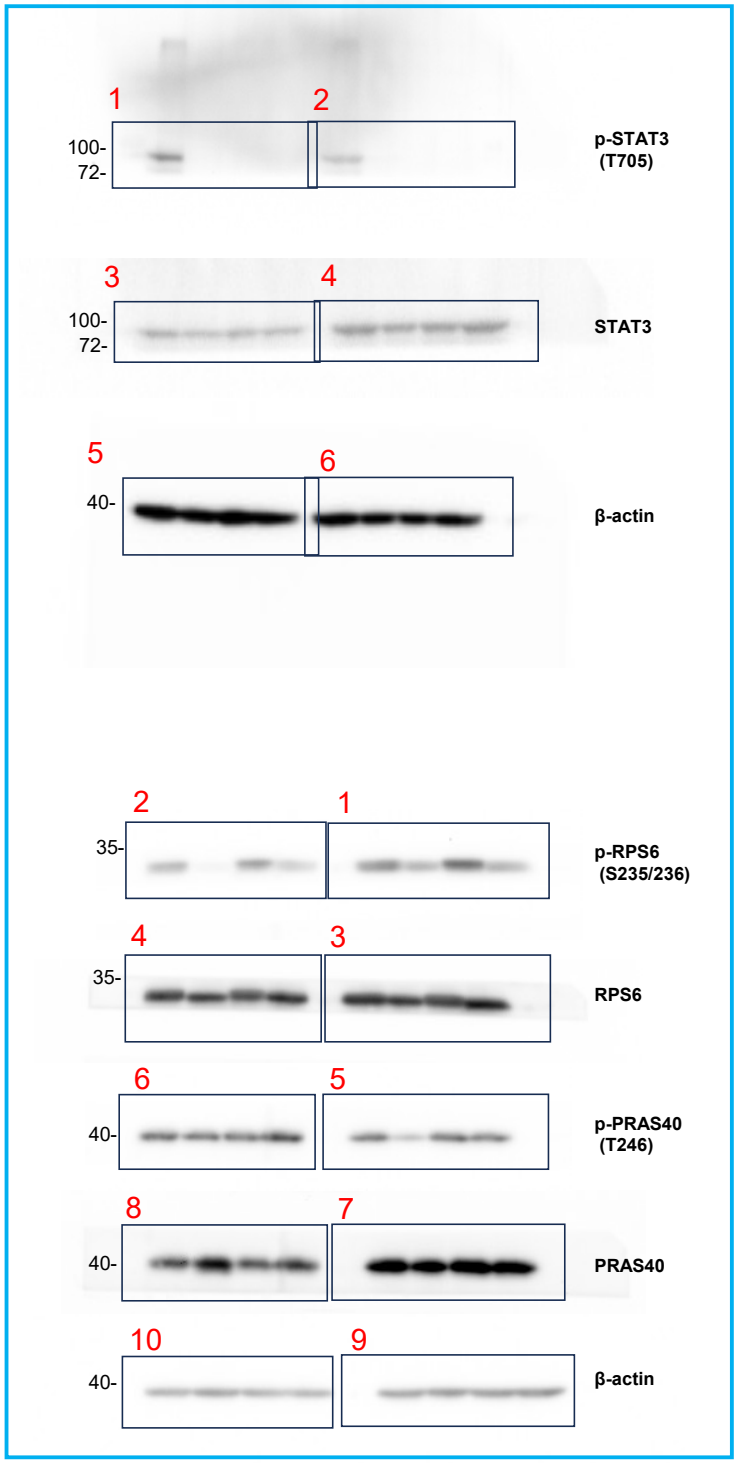
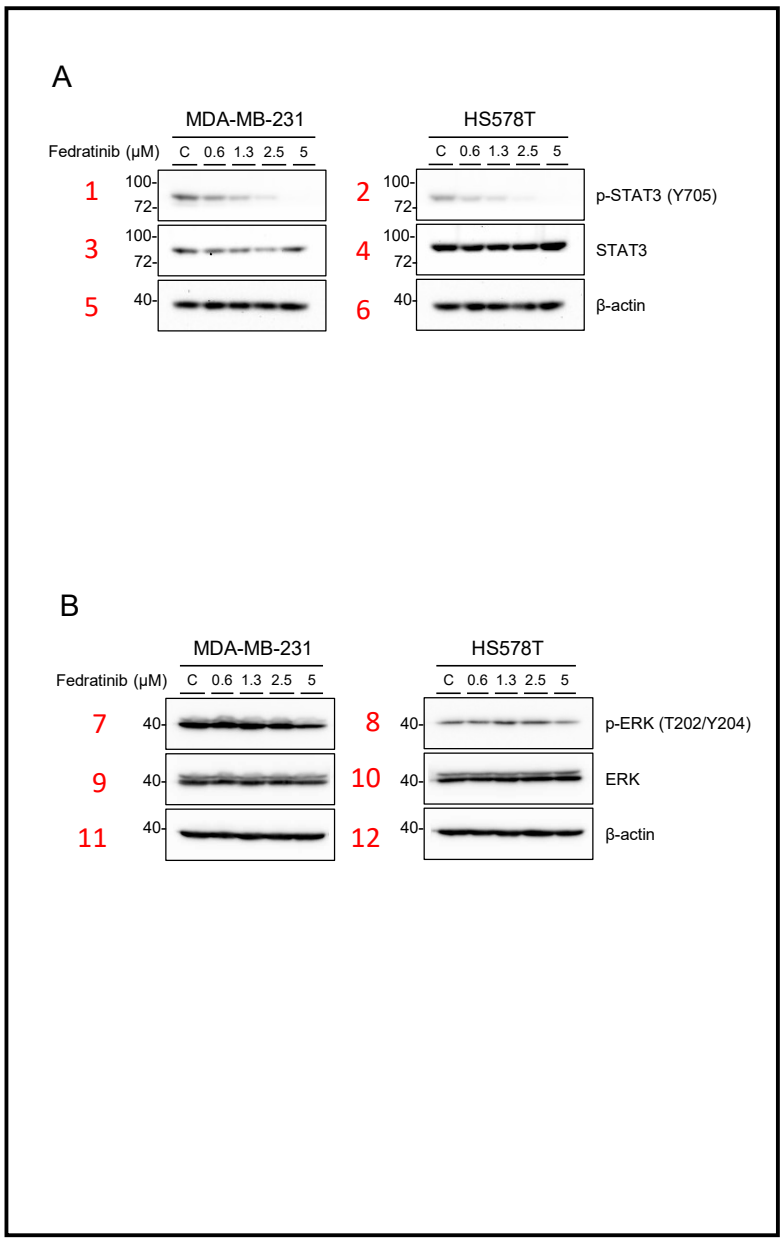

1
2
100-
72-
p-STAT3
(T705)
3
4
100-
72-
STAT3
5
6
40-
β-actin
2
1
35-
p-RPS6
(S235/236)
4
3
35-
RPS6
6
5
40-
p-PRAS40
(T246)
8
7
40-
PRAS40
10
9
40-
β-actin

Figure S3


A
MDA-MB-231
HS578T
Fedratinib (μM)
C 0.6 1.3 2.5 5
1
2
3
4
5
6
100-
72-
40-
p-STAT3 (Y705)
STAT3
β-actin
B
MDA-MB-231
HS578T
Fedratinib (μM)
C 0.6 1.3 2.5 5
7
8
9
10
11
12
40-
p-ERK (T202/Y204)
ERK
β-actin

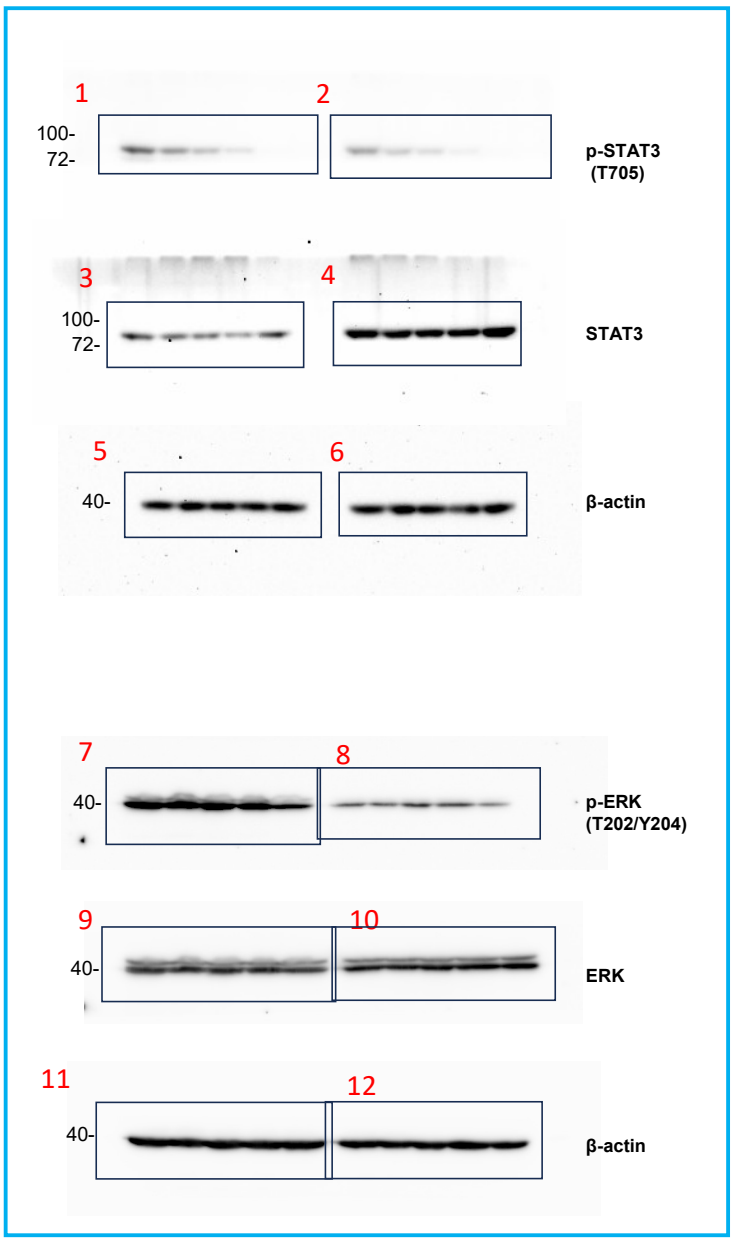
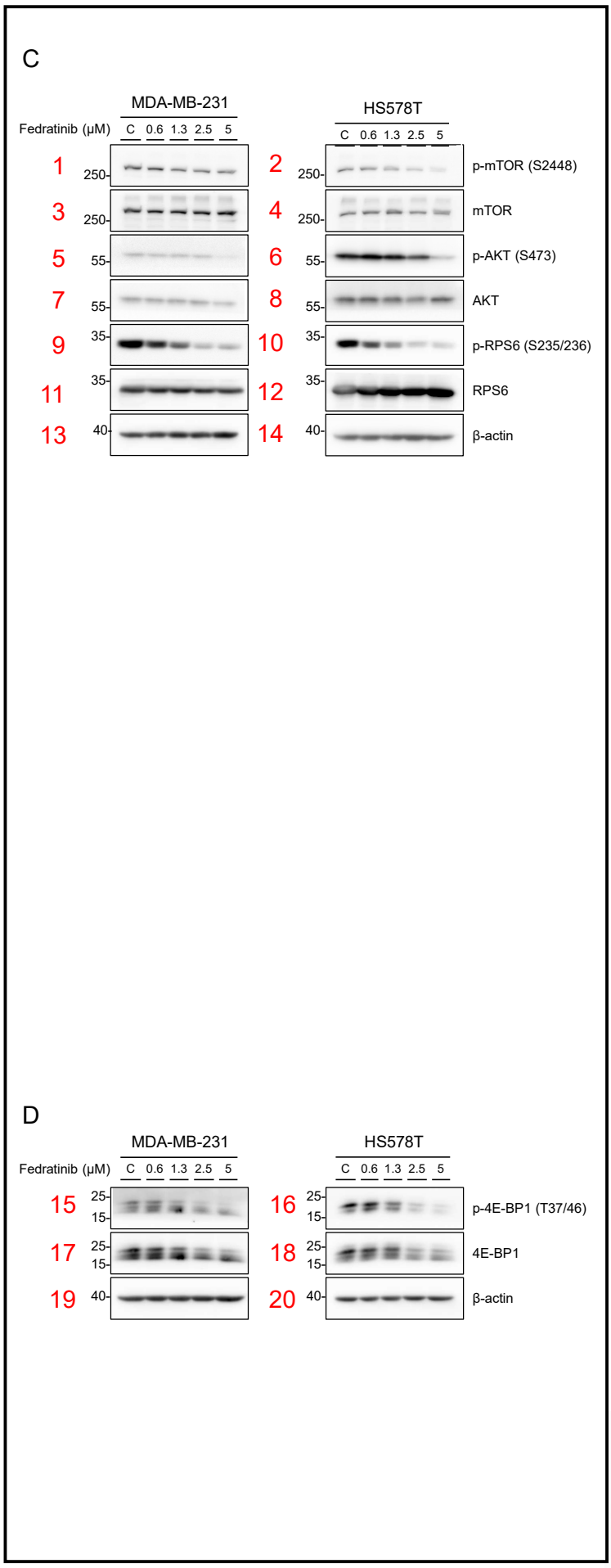

1
2
100-
72-
p-STAT3
(T705)
3
4
100-
72-
STAT3
5
6
40-
β-actin
7
8
40-
p-ERK
(T202/Y204)
9
10
40-
ERK
11
12
40-
β-actin

Figure S3


C
MDA-MB-231
HS578T
Fedratinib (μM)
C 0.6 1.3 2.5 5
1 2 p-mTOR (S2448)
3 4 mTOR
5 6 p-AKT (S473)
7 8 AKT
9 10 p-RPS6 (S235/236)
11 12 RPS6
13 14 β-actin
250-
55-
35-
40-
D
MDA-MB-231
HS578T
Fedratinib (μM)
C 0.6 1.3 2.5 5
15 16 p-4E-BP1 (T37/46)
17 18 4E-BP1
19 20 β-actin
25-
15-
40-

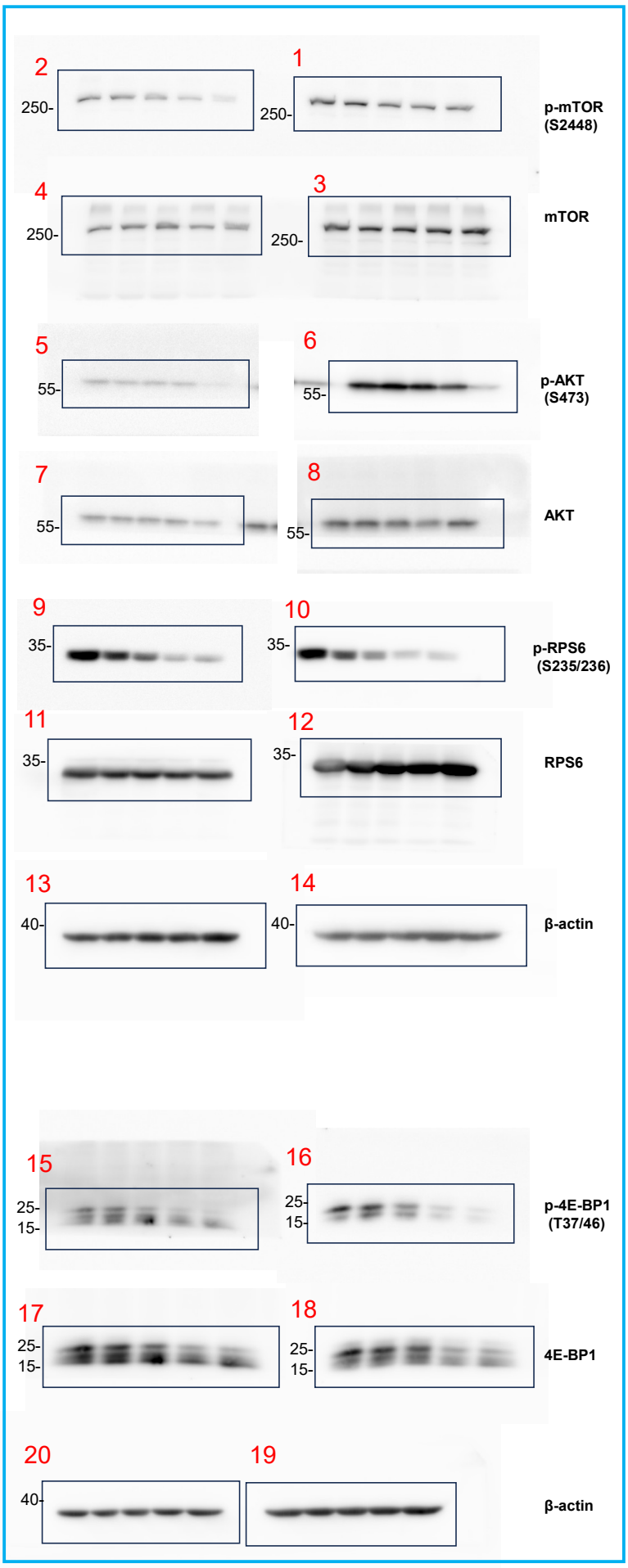
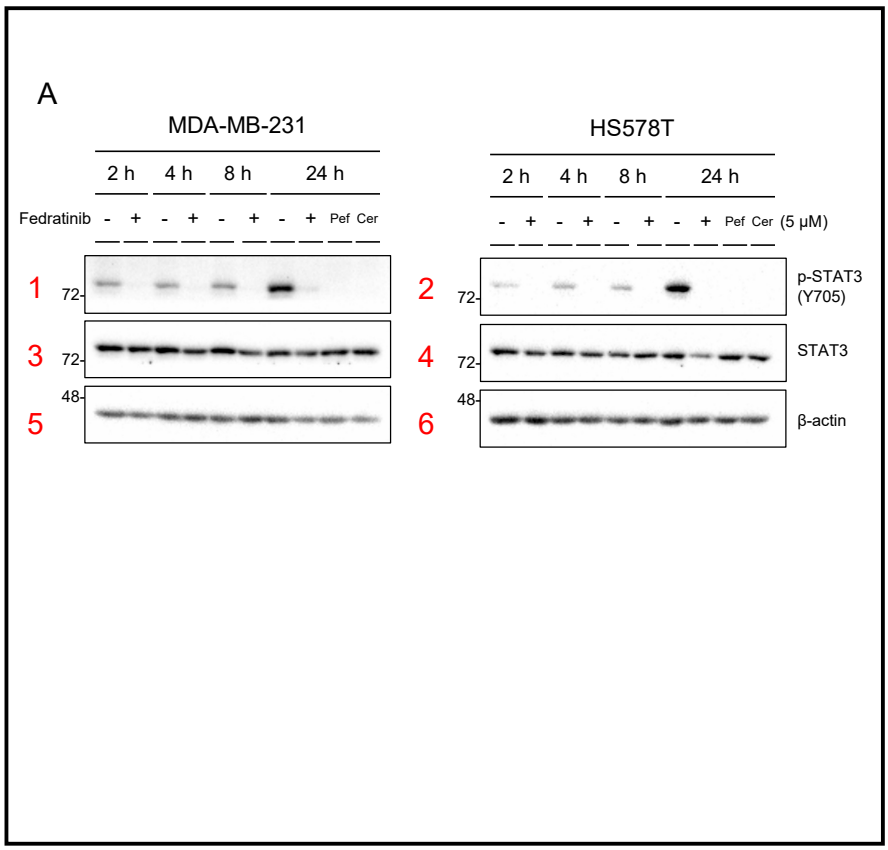

2 1 p-mTOR (S2448)
4 3 mTOR
5 6 p-AKT (S473)
7 8 AKT
9 10 p-RPS6 (S235/236)
11 12 RPS6
13 14 β-actin
15 16 p-4E-BP1 (T37/46)
17 18 4E-BP1
20 19 β-actin
250-
55-
35-
40-
25-
15-

Figure S4


A
MDA-MB-231
HS578T
2 h
4 h
8 h
24 h
Fedratinib
Pef
Cer
(5 μM)
1
2
3
4
5
6
72-
48-
p-STAT3 (Y705)
STAT3
β-actin

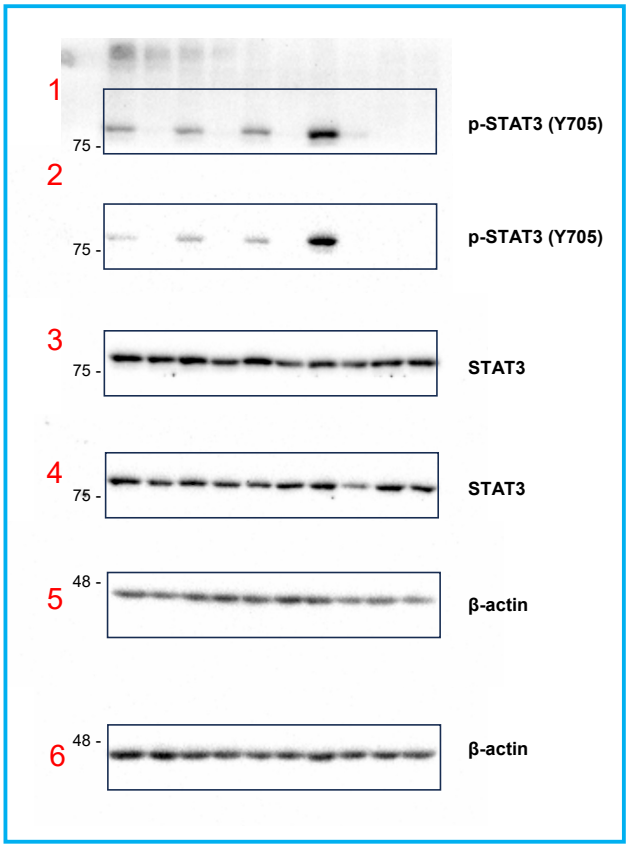
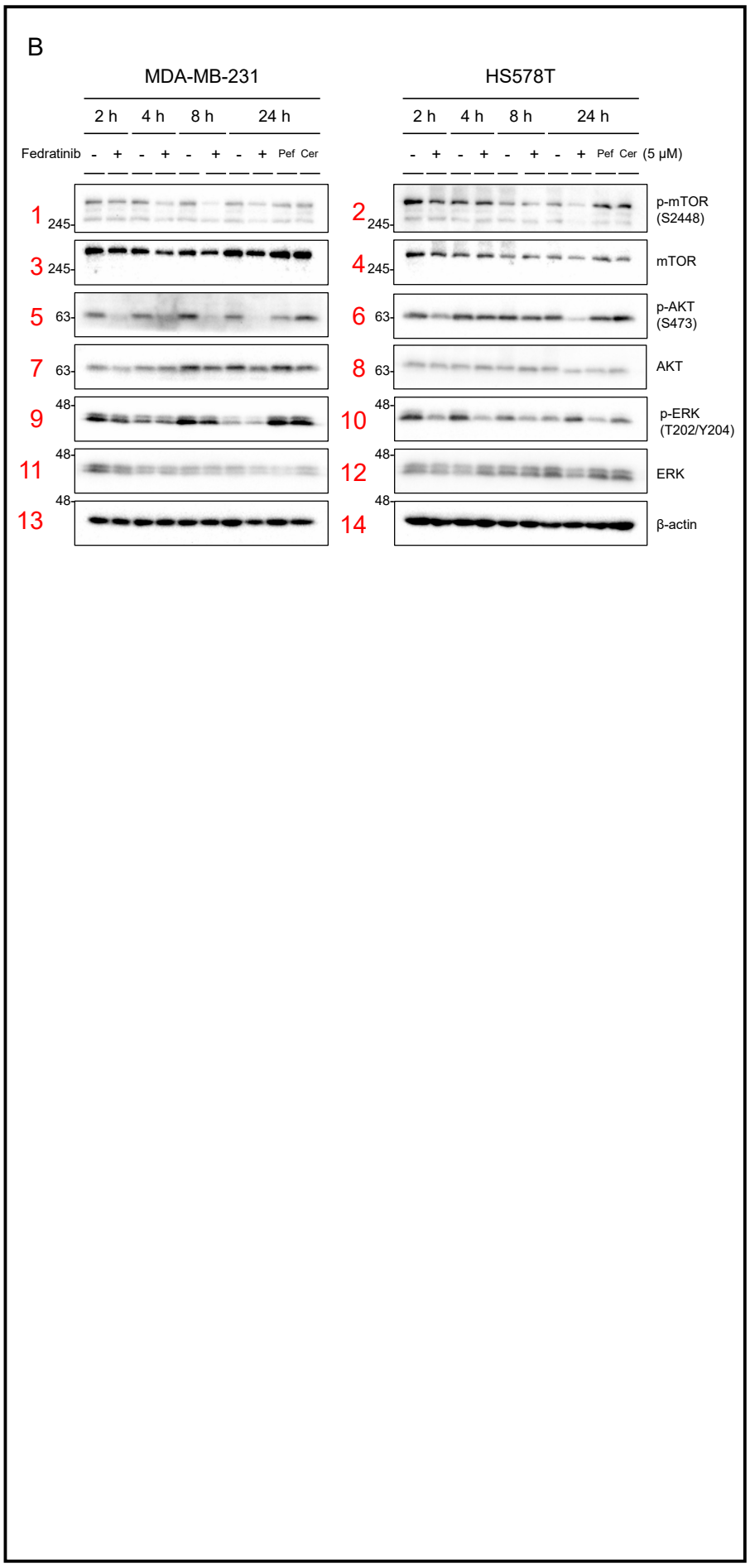

1
2
3
4
5
6
75 -
48 -
p-STAT3 (Y705)
p-STAT3 (Y705)
STAT3
STAT3
β-actin
β-actin

Figure S4


B
MDA-MB-231
HS578T
2 h
4 h
8 h
24 h
Fedratinib - + - + - + - + Pef Cer
- + - + - + - + Pef Cer (5 μM)
1 245
2 245
p-mTOR (S2448)
3 245
4 245
mTOR
5 63
6 63
p-AKT (S473)
7 63
8 63
AKT
9 48
10 48
p-ERK (T202/Y204)
11 48
12 48
ERK
13 48
14 48
β-actin

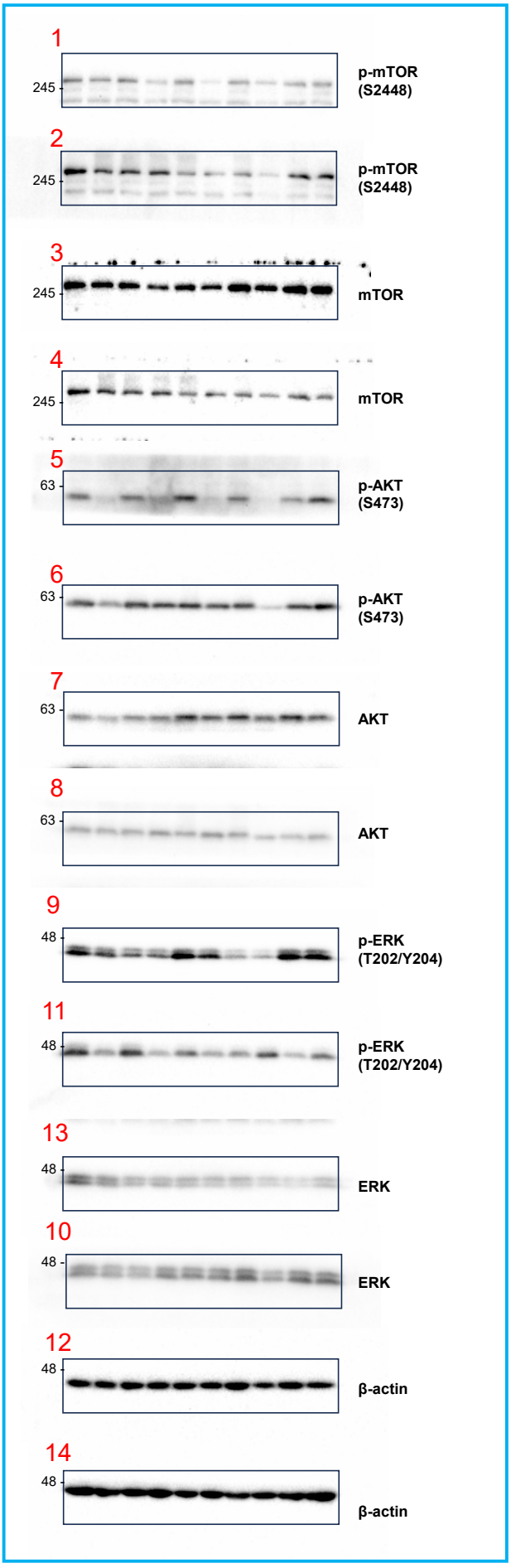
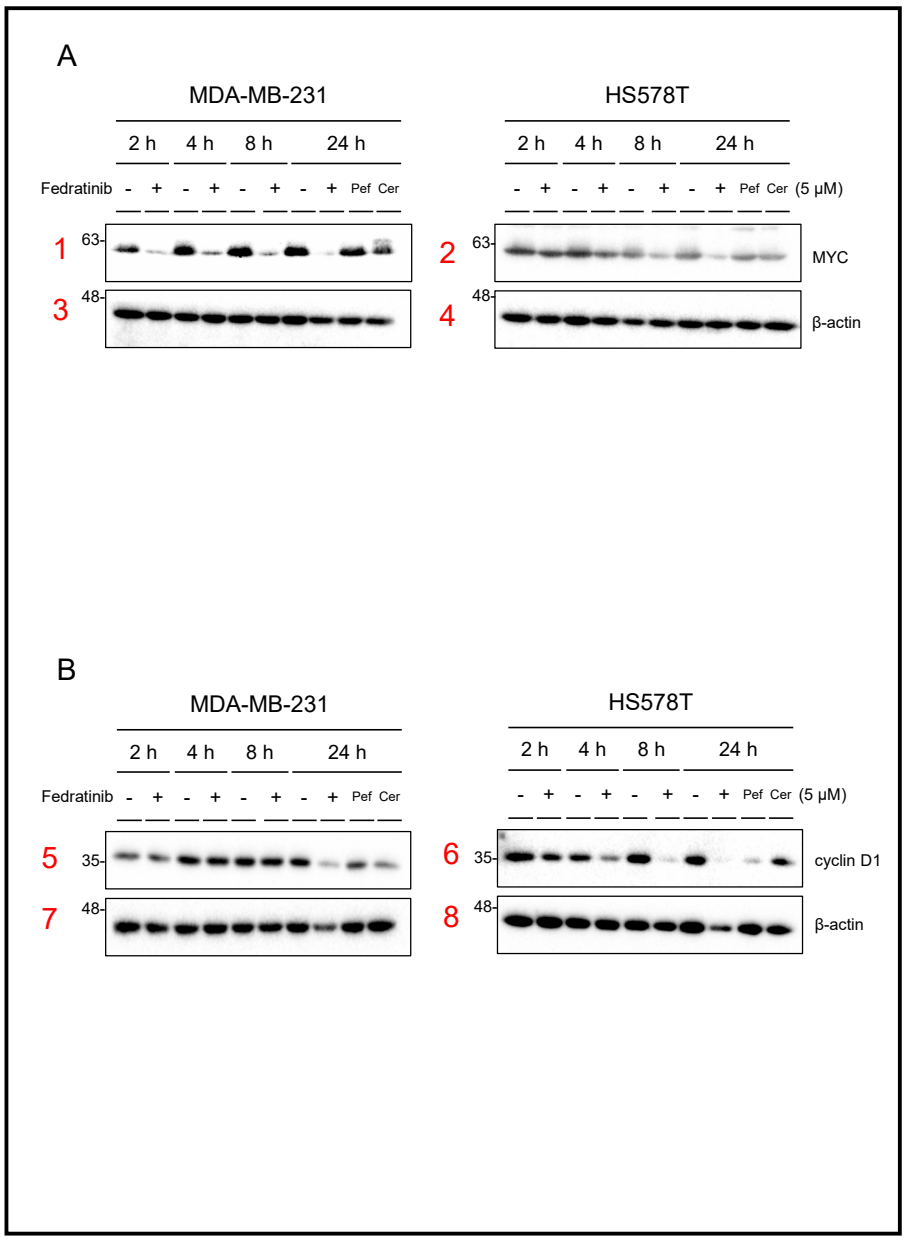

1
245
p-mTOR (S2448)
2
245
p-mTOR (S2448)
3
245
mTOR
4
245
mTOR
5
63
p-AKT (S473)
6
63
p-AKT (S473)
7
63
AKT
8
63
AKT
9
48
p-ERK (T202/Y204)
11
48
p-ERK (T202/Y204)
13
48
ERK
10
48
ERK
12
48
β-actin
14
48
β-actin

Figure S5


A
MDA-MB-231
HS578T
2 h
4 h
8 h
24 h
Fedratinib - + - + - + - + Pef Cer (5 μM)
1
2
3
4
63
48
MYC
β-actin
B
MDA-MB-231
HS578T
5
6
7
8
35
cyclin D1
β-actin

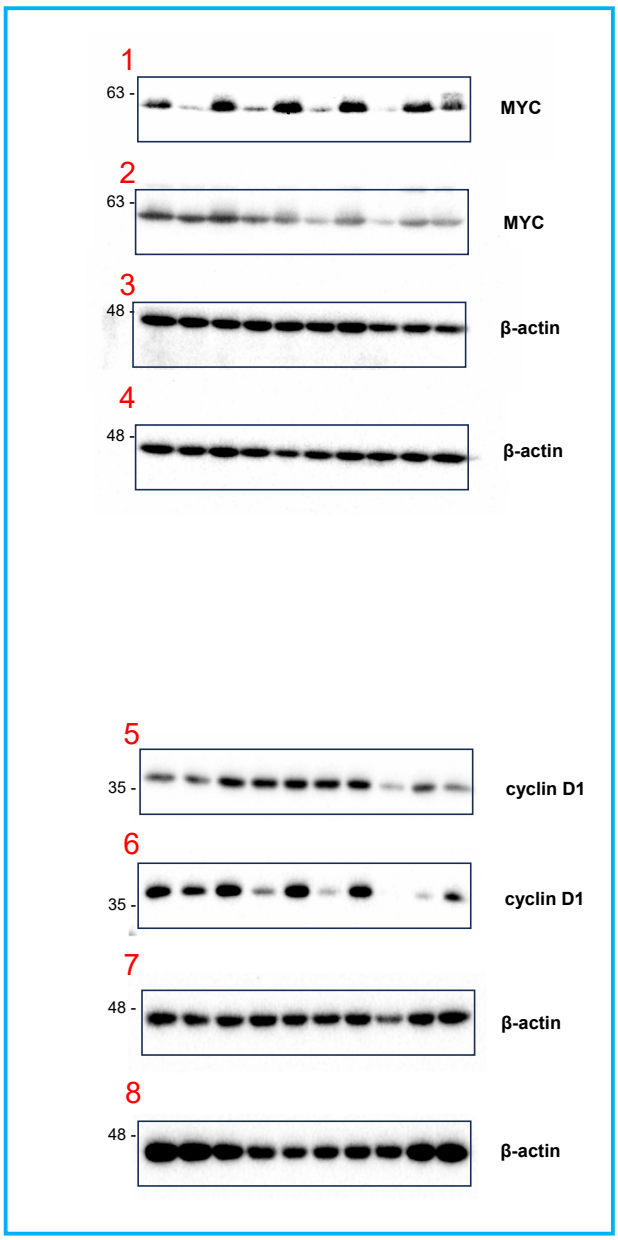
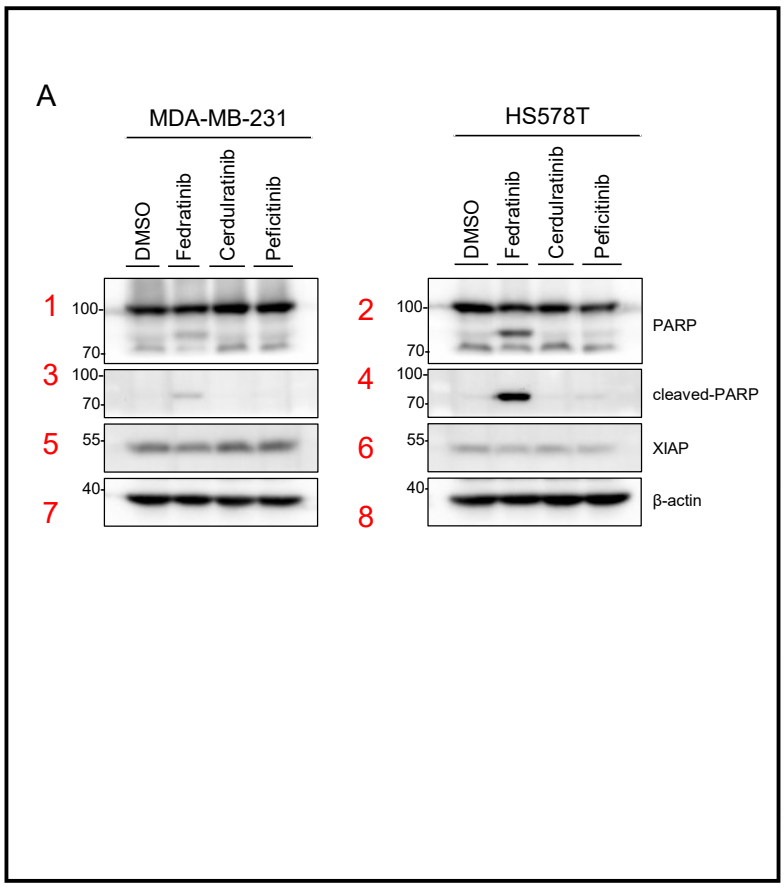

1
2
3
4
63
48
MYC
β-actin
5
6
7
8
35
cyclin D1

Figure S6


A
MDA-MB-231
HS578T
DMSO
Fedratinib
Cerdulratinib
Peficitinib
1
2
3
4
5
6
7
8
100-
70-
55-
40-
PARP
cleaved-PARP
XIAP
β-actin

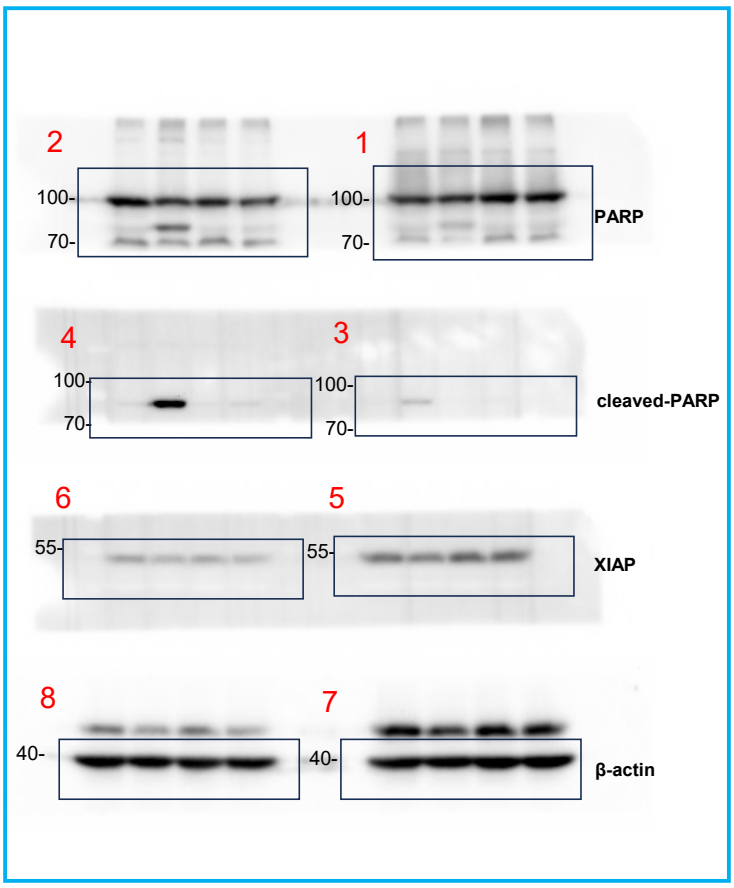
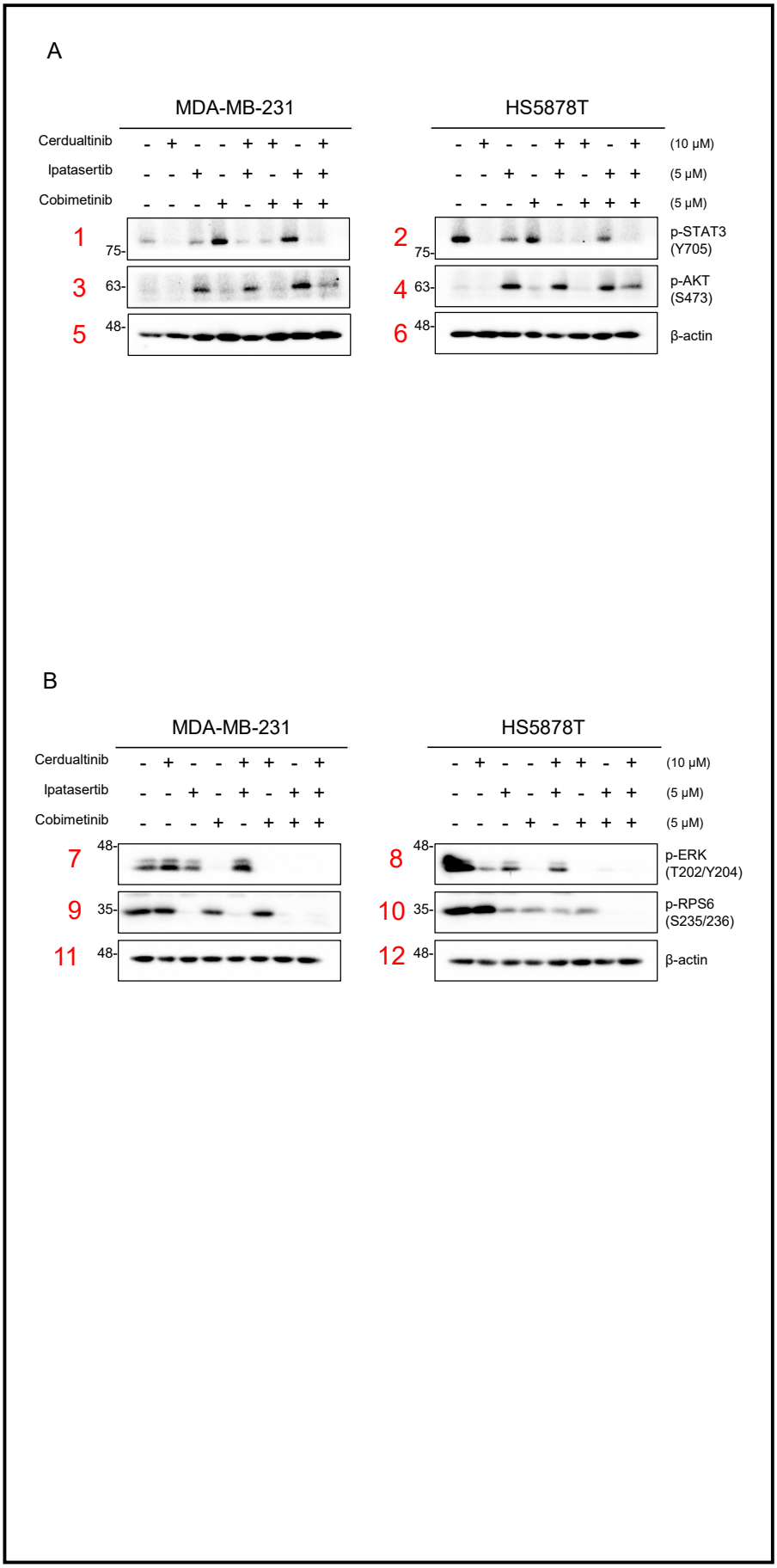

2
1
100-
70-
PARP
4
3
cleaved-PARP
6
5
55-
XIAP
8
7
40-
β-actin

Figure S8


A
MDA-MB-231
HS5878T
Cerdualtinib
Ipatasertib
Cobimetinib
(10 μM)
(5 μM)
(5 μM)
1
2
3
4
5
6
75-
63-
48-
p-STAT3 (Y705)
p-AKT (S473)
β-actin
B
MDA-MB-231
HS5878T
Cerdualtinib
Ipatasertib
Cobimetinib
(10 μM)
(5 μM)
(5 μM)
7
8
9
10
11
12
48-
35-
p-ERK (T202/Y204)
p-RPS6 (S235/236)
β-actin

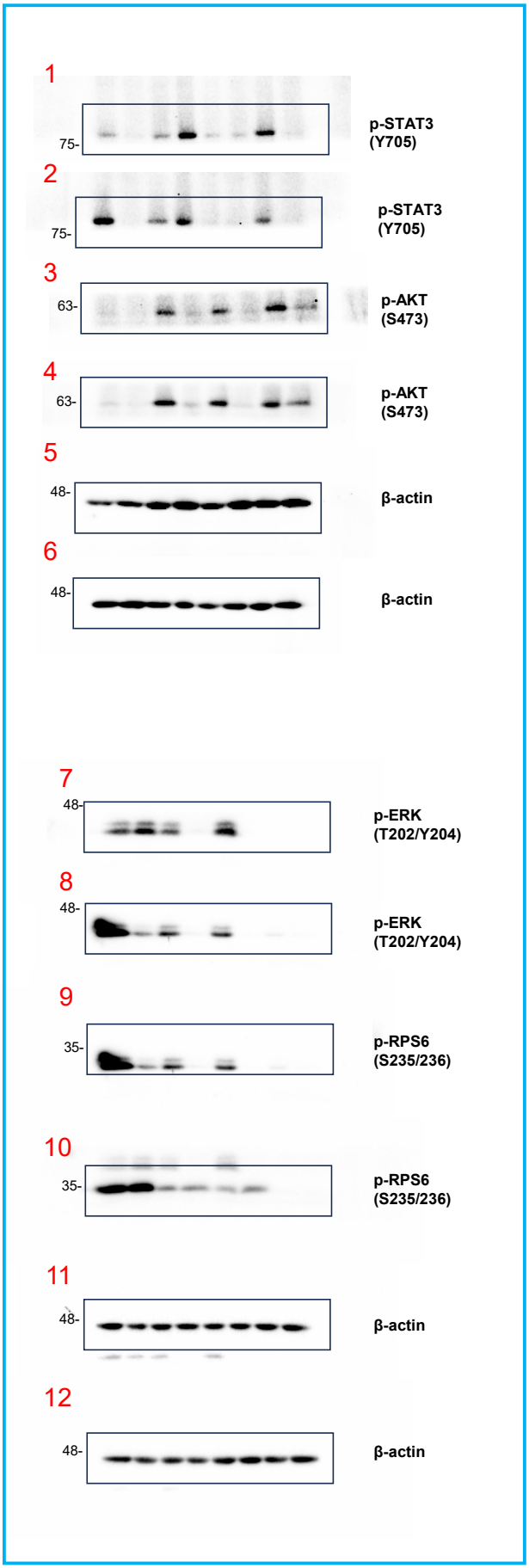
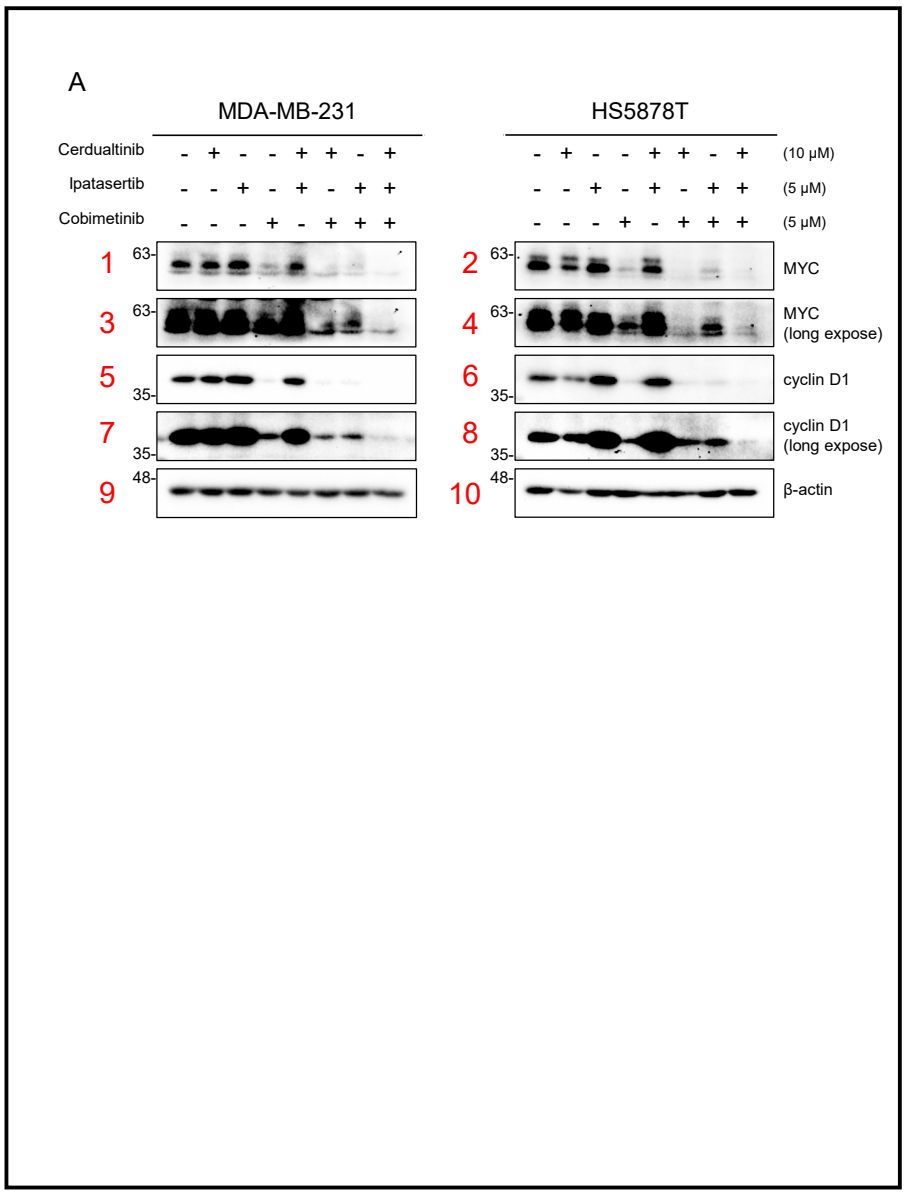

1
2
3
4
5
6
75-
63-
48-
p-STAT3 (Y705)
p-AKT (S473)
β-actin
7
8
9
10
11
12
35-
p-ERK (T202/Y204)
p-RPS6 (S235/236)
β-actin

Figure S9


A
MDA-MB-231
HS5878T
Cerdualtinib
Ipatasertib
Cobimetinib
(10 μM)
(5 μM)
(5 μM)
1
2
3
4
5
6
7
8
9
10
63-
35-
48-
MYC
MYC (long expose)
cyclin D1
cyclin D1 (long expose)
β-actin

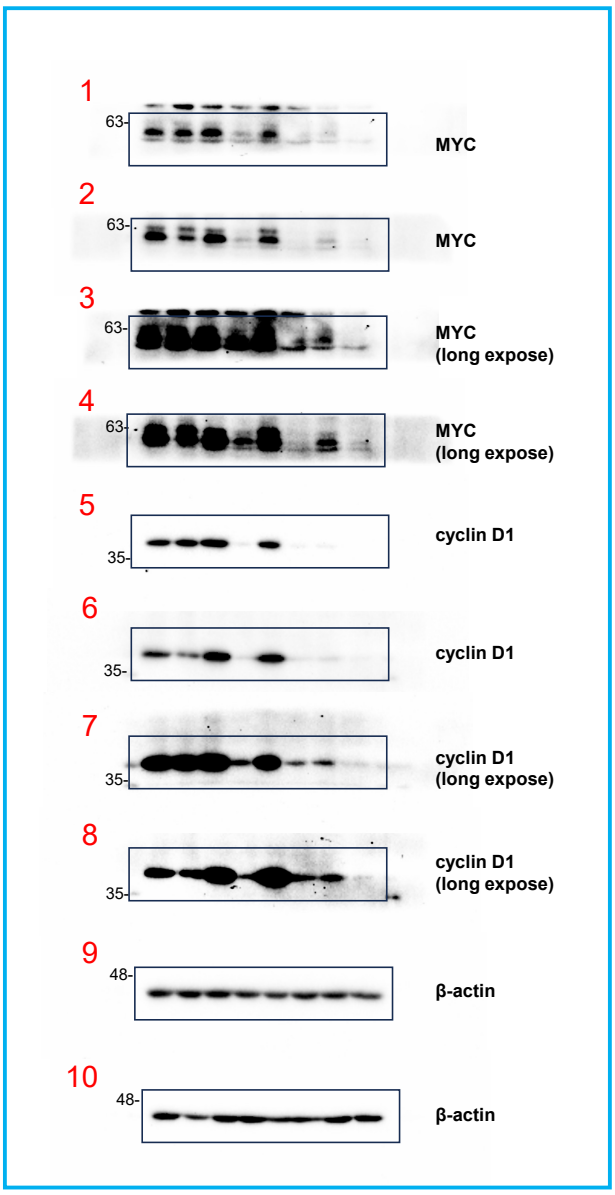
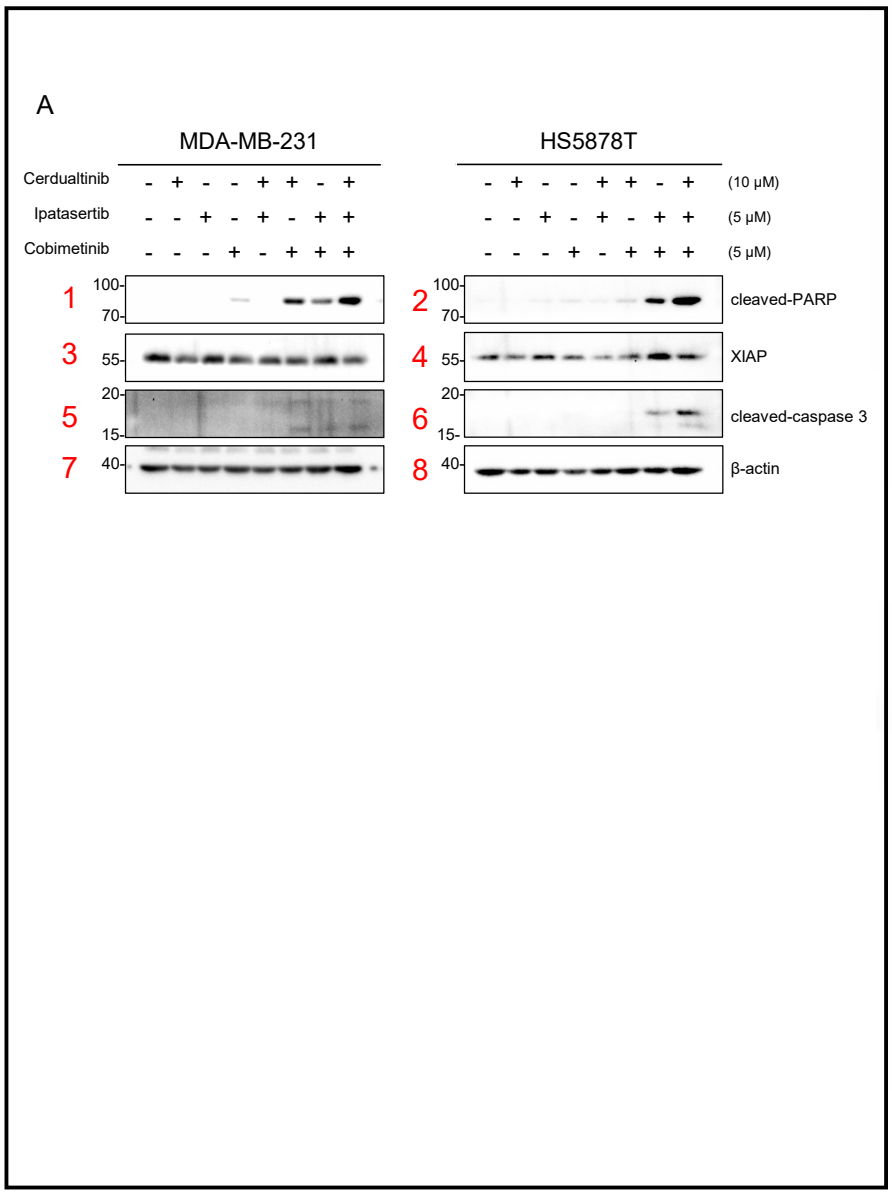
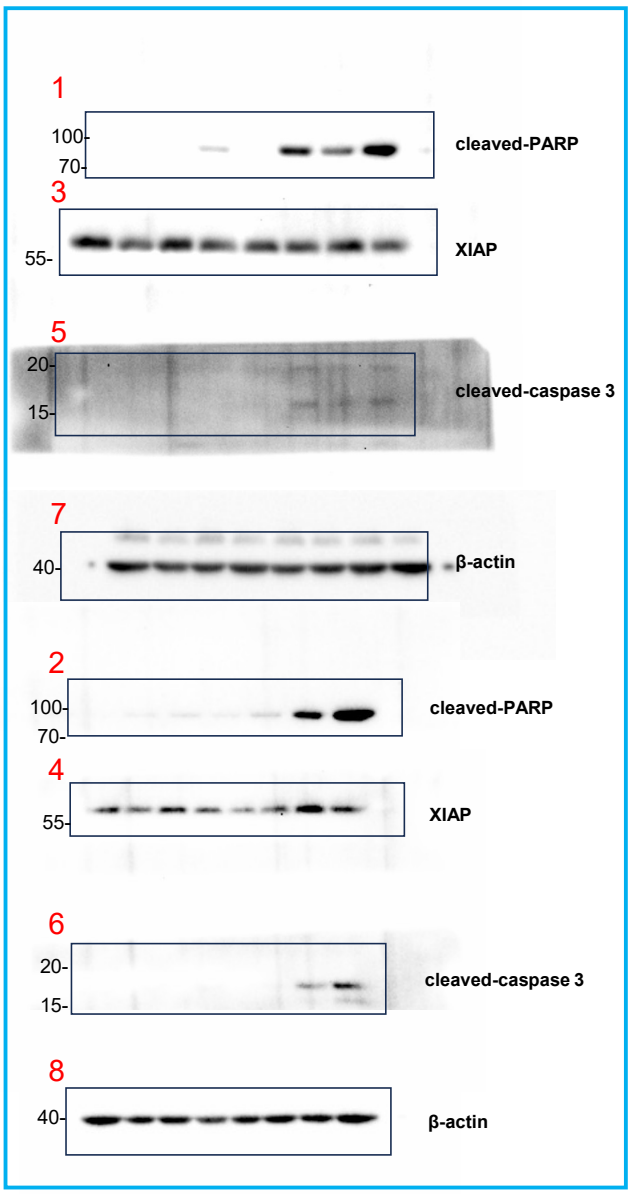

1
2
3
4
5
6
7
8
9
10
63-
35-
48-
MYC
MYC
MYC (long expose)
MYC (long expose)
cyclin D1
cyclin D1
cyclin D1 (long expose)
cyclin D1 (long expose)
β-actin
β-actin

Figure S10


A
MDA-MB-231
HS5878T
Cerdualtinib
Ipatasertib
Cobimetinib
(10 μM)
(5 μM)
(5 μM)
1
2
3
4
5
6
7
8
100
70
55
20
15
40
cleaved-PARP
XIAP
cleaved-caspase 3
β-actin


1
100
70
cleaved-PARP
3
55
XIAP
5
20
15
cleaved-caspase 3
7
40
β-actin
2
100
70
cleaved-PARP
4
55
XIAP
6
20
15
cleaved-caspase 3
8
40
β-actin