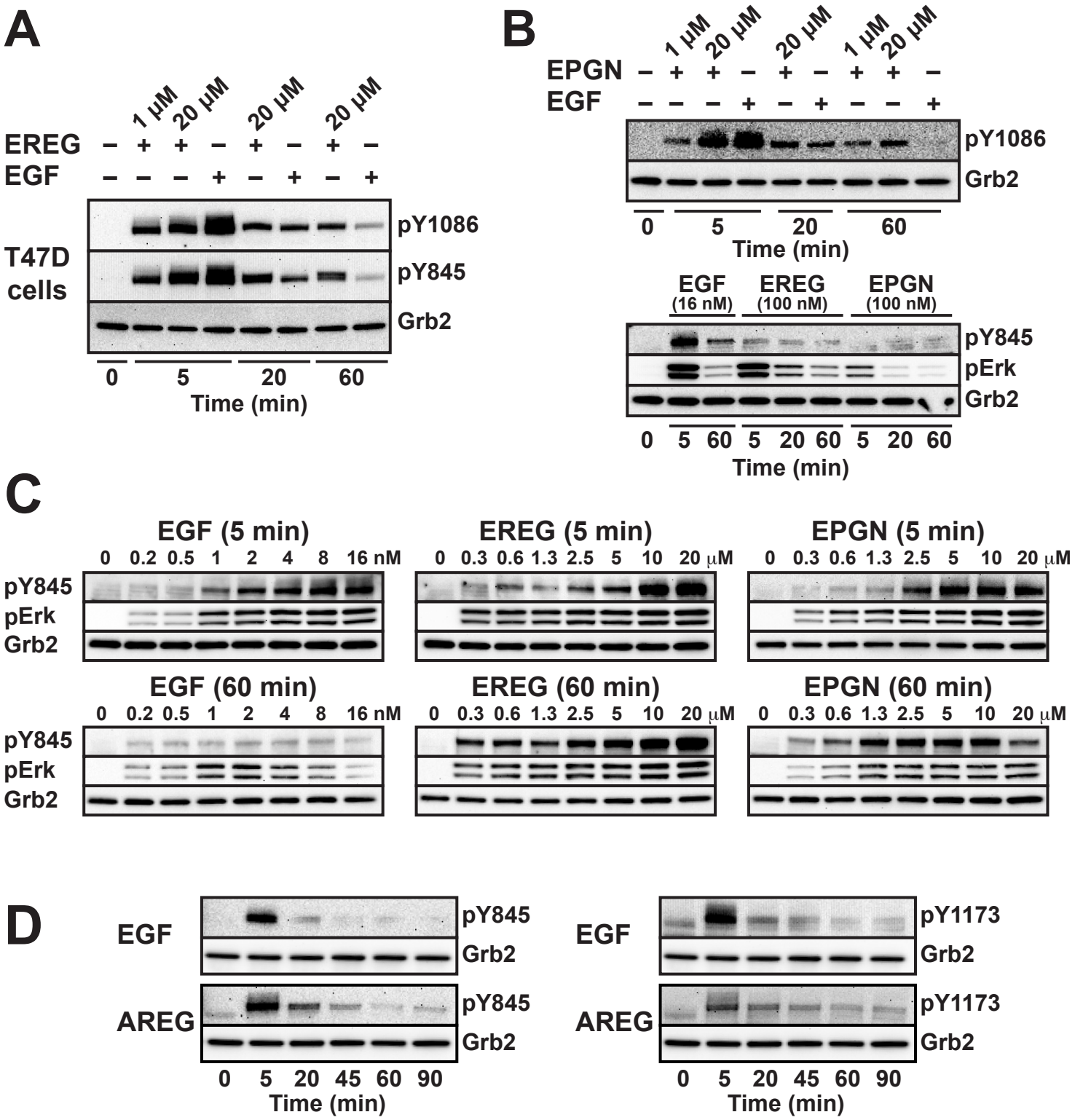
A
1 μM
20 μM
20 μM
20 μM
EREG – + + – + – + –
EGF – – – + – + – +
T47D cells
pY1086
pY845
Grb2
0 5 20 60
Time (min)
B
1 μM
20 μM
20 μM
1 μM
20 μM
EPGN – + + – + – + + –
EGF – – – + – + – – +
pY1086
Grb2
0 5 20 60
Time (min)
EGF (16 nM)
EREG (100 nM)
EPGN (100 nM)
pY845
pErk
Grb2
0 5 60 5 20 60 5 20 60
Time (min)
C
EGF (5 min)
0 0.2 0.5 1 2 4 8 16 nM
EREG (5 min)
0 0.3 0.6 1.3 2.5 5 10 20 μM
EPGN (5 min)
0 0.3 0.6 1.3 2.5 5 10 20 μM
pY845
pErk
Grb2
EGF (60 min)
0 0.2 0.5 1 2 4 8 16 nM
EREG (60 min)
0 0.3 0.6 1.3 2.5 5 10 20 μM
EPGN (60 min)
0 0.3 0.6 1.3 2.5 5 10 20 μM
pY845
pErk
Grb2
D
EGF
AREG
pY845
Grb2
0 5 20 45 60 90
Time (min)
EGF
AREG
pY1173
Grb2
0 5 20 45 60 90
Time (min)