Supporting Information

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SI Text

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	Dimerizer (Hr)	0	3	6	9	12	15	18	21	24
10A.B2	G1 (%)	90.8	90.6	86.1	80.5	64.7	68.8	66.6	74.3	78.4
	S (%)	3.4	3.7	5.3	10.9	20.7	12.7	11.1	10.2	8.9
	G2 (%)	5.7	5.5	8.4	7.9	13.6	17.7	21.4	14.3	11.8
10A.B2Brk	G1 (%)	88.3	83.7	83.7	68.3	60.1	65.9	65.7	74.4	78.4
	S (%)	4.5	6.1	6.5	20.1	23.2	15.1	11.2	8.5	8
	G2 (%)	7	10.1	9.5	11.4	16.5	18.9	23	17	13.4

Fig. S1. Effect of Brk expression on ErbB2-induced cell cycle progression. Parental ErbB2 expressing MCF-10A cells (10A.B2) or cells coexpressing ErbB2 and Brk were stimulated with dimerizer to activate ErbB2. Cells were fixed at indicated times after stimulation, stained with propidium iodide, and analyzed by flow cytometry. Percentage of cells in G₁ or S or G₂ phase of the cell cycle is shown.



Fig. S2. ErbB2-Brk cooperates to activate cyclin E/Cdk2 and shorten G₁ phase of cell cycle. (*A*) and (*B*) 10A.cB2 and 10A.cB2Brk cells were starved and stimulated with 1 μ M dimerizer for indicated times. Cells lysates were analyzed for changes in levels of cyclin D1, cyclin E, and p27. β -Actin immunoblots serve as loading control. The fold changes in protein levels were calculated by normalizing the values to levels of Actin. (*C*) 10A.cB2 and 10A.cB2Brk cells were starved and stimulated with 1 μ M dimerizer for indicated times. Changes in Cdk2 kinase activity were monitored by incubating cdk2 immunoprecipitates with Histone H1 and [γ -³²P] ATP in an *in vitro* kinase reaction. The amount of cdk2 in the immunoprecipitates was determined by immunoblotting with anti-cdk2 antibody. The fold changes were calculated by normalizing the values to Cdk2 protein levels in the immunoprecipitate.