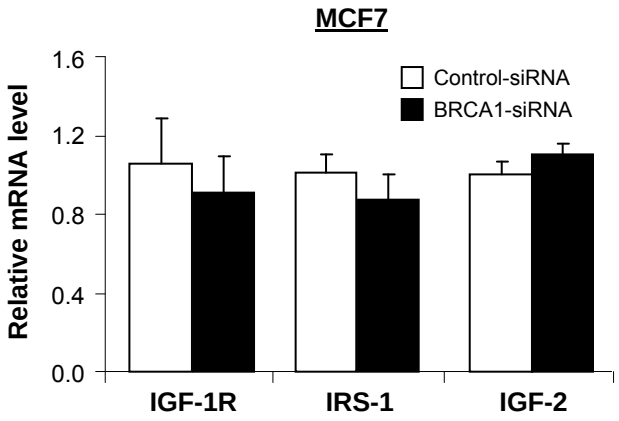
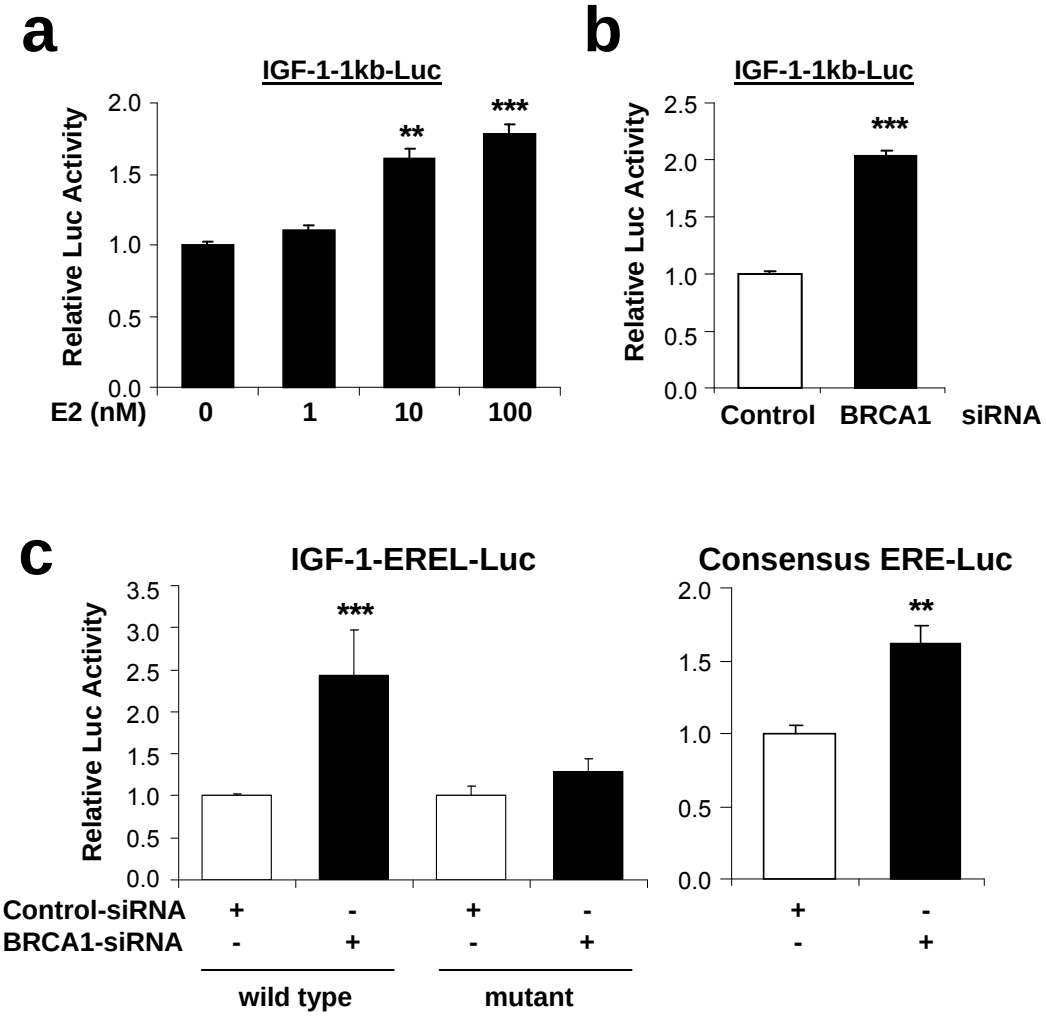
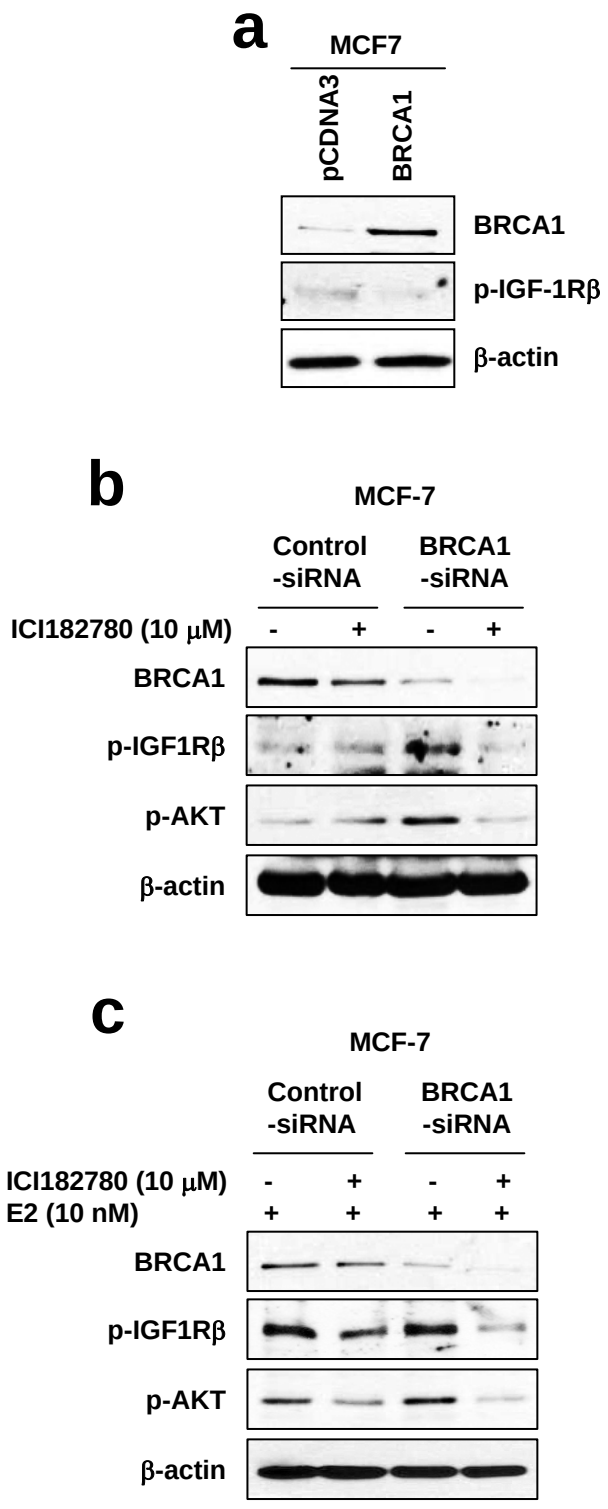


Supplementary Figure S1 Quantitative RT-PCR analysis of IGF-1R, IRS-1 and IGF-2 expression in BRCA1-KD MCF7 cells. Representative data from two independent experiments performed in triplicate are shown as mean ± SEM.



Supplementary Figure S2 Regulation of IGF-1 promoter reporter activity by BRCA1. (a) E2 induced expression of the reporter gene containing 1 kb of the promoter region of human IGF-1 gene (IGF-1-1 kb-Luc) in a dose-dependent manner. (b) BRCA1-KD induced reporter gene expression from human IGF-1 promoter reporter (IGF-1-1 kb-Luc) in MCF7 cells. (c) BRCA1-KD induced wild type IGF-1-EREL-Luc or consensus ERE-Luc, but not mutant IGF-1-EREL-Luc activity in MCF7 cells under normal growth condition. $^{**}P < 0.01$; $^{***}P < 0.001$. Representative data from two independent experiments are shown as mean ± SEM. $^{**}P < 0.01$; $^{***}P < 0.001$.



Supplementary Figure S3 Regulation of IGF1-Rβ phosphorylation by BRCA1. (**a**) Overexpression of BRCA1 further reduced phospho-IGF-1Rβ in MCF7 cells. MCF7 cells treated with expression DNA (control vs. BRCA1) were subject to western blot analysis. The siRNA-transfected MCF7 cells either under normal growth conditions (**b**) or E2-stimulated conditions (**c**) were treated with 10 μM ICI172780 for 24 h followed and analyzed by western blot analysis with indicated antibodies. β-actin was used as a loading control.

Supplementary Table S1 Protein kinase inhibitors and their known biochemical IC_{50} (nM) used in this study.

Inhibitor	Known targets (IC_{50})	Reference
OSI-906	IGF-1R (35), IR (75)	1
AG 1024	IGF-1R (18,000), IR (80,000)	2
BMS-536924	IGF-1R (100), IR (73), FAK (150), LCK (341), MEK (182)	3
BMS-754807	IGF-1R (1.8), IR (1.7), MET (5.6), AURKA (9), AURKB (25), TrkA (7.4), TrkB (4.1), RON (44)	4
GSK1904529A	IGF-1R (27), IR (25)	5
BEZ235	PI3Kα (4), PI3Kβ (75), PI3Kδ (7), PI3Kγ (5), mTOR (20.7)	6

References for Supplementary Table S1

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