

Supplementary data – Materials and Methods

Antibodies

BRCA1 was detected using the D9 antibody (Santa Cruz Biotech. Ltd Cat. No. sc-6954). p63 antibody was purchased from Abcam (clone 4A4 ab3239). Phosphorylated Serine 139 Histone H2AX antibody was purchased from Millipore (Cat. No. 05-636). For flow cytometry primary antibody staining was followed by staining with a fluorescently tagged secondary antibody (AlexaFluor goat anti-mouse 488 Cat no. A11017). Mouse monoclonal anti- β -tubulin (Sigma Cat. No. T4026) and mouse monoclonal anti-GAPDH (Biogenesis Cat. No. 4699-9555) were used to demonstrate equal loading of protein. BRCA1 was immunoprecipitated with Ab-1 (Oncogene Cat. No. OP92). AP-2 γ antibodies were purchased from Santa Cruz Biotech Ltd (Cat no. sc-12762 western blot and sc-81181 for ChIP). IgG1 and IgG2a isotype controls were purchased from Dako Cytomation (cat no X0931 and X0943, respectively).

Primers

ChIP assays:

C40 chip-F2: 5'- ggA AgC TTg ACT ACC gTg gA-3';

C40 chip-R2: 5'- CAg gTT Agg CTT Tgg AAC gA-3'

RqPCR

Δ Np63	F:	5'- gAg TTC TgT TAT CTT CTT Ag-3'
	R:	5'- TgT TCT gCg CgT ggT CTg-3'
TA p63	F:	5'- ATg TCC CAg AgC ACA CAg AC-3'
	R:	5'- CAC ATg ggg TCA CTC Agg TC -3'
Pan p63	F:	5'- gAC Agg AAg gCg gAT gAA gAT Ag-3'
	R:	5'- ACA gCC Tgg ATA gCg gAT ACA C -3'
GATA3	F:	5'- CAG ACC ACC ACA ACC ACA CTC T-3'
	R:	5'- ggA TgC CTT CCT TCT TCA TAg TCA-3'
SMA	F:	5'- CTg TTC CAg CCA TTC TTC AT -3'
	R:	5'- TCA TgA TgC TgT TgT Agg Tgg T -3'
P-cadherin	F:	5'- gCg gAg ACA ggC TAT gAg TC -3'
	R:	5'- AgT CAA ACT gCC CAC ATT CC -3'
β -tubulin	F:	5'- CgC AgA AgA ggA ggA ggA TT -3'
	R:	5'- gAg gAA Agg ggC AgT TgA gT -3'

Muc1	F:	5'- ACA ATT gAC TCT ggC CTT CC-3'
	R:	5'- CAg gTT ATA TCg AgA ggC TgC T-3'
CXCL1	F:	5'- TCC gTg gCC ACT gAA CTg-3'
	R:	5'- gTg gCT ATg ACT TCg gTT Tg-3'
CTPS1	F:	5'- ATC CCg Tgg TCg TAg AC-3'
	R:	5'- Tgg CCA ACA AAC TTC AA-3'
ITAG α 6:	F:	5'- TCg gCA Cag CAA CCT TgA A-3'
	R:	5'- TTg TgA gAC TCC TTT TCC AAT CC -3'
ITAG β 1	F:	5'- CAA gCA ggg CCA AAT TgT gg-3'
	R:	5'- CCT TTg CTA Cgg TTg gTT ACA TT-3'
GAPDH	F:	5'- ggg AAg gTg AAg gTC ggA gT-3'
	R:	5'- TCC ACT TTA CCA gAg TTA AAA gCA g-3'

siRNA sequences

BRCA1 5'-GCGUGCAGCUGAGAGGCAU-3'

Δ Np63#1 5'-GGACAGCAGCAUUGAUCAA-3'

TAp63 5'-UUCCUCAGGUCCAGAGGUUU-3'

p63 γ 5'-CUCCAAAACAAUCUGACGU-3'

AP-2 γ 5'-CCAGUGGCAGAAUAUUA-3'

p53 5'- UGUUCCGAGAGCUGAAUGA-3'

p63 UTR siRNA (targeting p63 α and β) was a kind gift from Professor Dennis McCance (Queen's University Belfast).