

## **Legend to Supplementary Data figure 1 and figure 2**

BRCA1 immunocytochemistry in eight paraffin-embedded human breast cancer cell lines, of which four carried a *BRCA1* mutation (HCC1937, MDA-MB-436, SUM149PT and SUM1315MO2) and four had a wild-type *BRCA1* gene (BT20, HS578T, MCF-7 and SK-BR-7). Two-step serial dilutions are shown for the anti-BRCA1 monoclonal antibodies Ab-1 (MS110; Suppl Figure 1) and Ab-2 (MS13; Suppl Figure 2). Ab-1 was presumed optimal at a 1:100 dilution, where it stains the nuclei of all four wild-type cell lines but not of any of the four *BRCA1* mutant cell lines. At this dilution, Ab-1 also shows some cytoplasmic staining in several cell lines. The cytoplasmic staining may be aspecific as it is not seen at the 1:200 dilution of Ab-1 nor with Ab-2. Yet, the nuclear staining with Ab-1 at 1:200 is somewhat vague in wild-type cell lines HS578T and MCF-7, arguing for a 1:100 dilution of Ab-1. Ab-2 was presumed optimal at a 1:320 dilution, where it shows distinct nuclear staining in the four wild-type cell lines but not in the four *BRCA1* mutant cell lines. The negative control entails replacement of the primary antibody with an irrelevant monoclonal antibody of the IgG1 isotype that matches for both anti-BRCA1 antibodies. Magnification 40X.