nature cell biology

Author Correction: Topoisomerase IIα controls the decatenation checkpoint

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Correction to: *Nature Cell Biology* https://doi.org/10.1038/ncb1828, published online 21 December 2008.

In Fig. 1b of this Article, the authors mistakenly republished a blot previously published as Fig. 1d in their article in *Nature Structural & Molecular Biology* (*Nat. Struct. Mol. Biol.* **12**, 589–593; 2005). This duplicate publication was due to carelessness when preparing the *Nature Cell Biology* paper. For clarification, in the original experiment purified GST-BRCT domains of three different proteins (53BP1, MDC1 and BRCA1) were used to detect binding to Topoisomerase IIα from whole cell lysates (WCL) with or without phosphatase treatment and were run on the same gel with the following loading: 53BP1 (lanes 1,2), MDC1 (lanes 3,4), BRCA1 (lanes 5,6), and WCL (lanes 7,8). These experimental details have been confirmed from the original lab notebook (see 'Scan of the lab-book' below). Fig. 1b of the *Nature Cell Biology* article should have used lanes 3,4 to present GST-MDC1, but lanes 5,6 were used instead. The possible reason for this mistake is that, when initially scanned, the film was not fully labelled with sample names (as can be seen in the panel for Fig. 1b in Supplementary Fig. 3 of the *Nature Cell Biology* article), resulting in the use of the wrong part of the scan. Recent inspection of the film shows that labels were subsequently added (see 'Corrected full scan of Fig. 1b' below). The authors cannot specify why the original scanned blot was not labelled and when the labels were added, but are confident of the sample loading sequence based on the original lab-book notes. Moreover, in the *Nature Cell Biology* article, the authors neglected to note that the control WCL lanes 7,8 had been previously published in the *Nature Structural & Molecular Biology* article, and omitted the citation of that paper. Additionally, in the 'full scan' version of the Fig. 1b panel in Supplementary Fig. 3 of the *Nature Cell Biology* paper, the authors used a cropped version rather than providing an uncropped scan of the blot. The correct versions of Fig. 1b and the corresponding panel of Supplementary Fig. 3 are shown below.

The authors also provide two independent repeats of the experiment in Fig. 1b (see 'Repeat 1 of Fig. 1b' and 'Repeat 2 of Fig. 1b' below), showing results consistent with those originally reported. The methodology used in the repeat experiments is the same as in the original experiment, with one exception. In the Methods section of their *Nature Cell Biology* article, the authors did not specify that the anti-Topoisomerase IIα used in Fig. 1b was from Neomarkers. This antibody is no longer available and the experiments were therefore repeated with a different commercial antibody (as indicated in the legend below).

In addition, due to an error in the production process, the labels in Fig. 1d and in the Fig. 2c panel of Supplementary Fig. 3 were inadvertently flipped. The correct versions are shown below.

Legend for 'Repeat 1 of Fig. 1b' and 'Repeat 2 of Fig. 1b':

GST or GST–MDC1 BRCT domain was conjugated to glutathione-Sepharose beads and then used to pull down Topoisomerase IIα from HeLa cell lysates (untreated or treated with λ-phosphatase) as described in the original manuscript (*Nat. Cell Biol.* **11**, 204-210; 2009). The samples were immunoblotted with anti-Topoisomerase IIα antibody (Abcam, clone number EP1102Y, catalogue number ab52934, 1:500 dilution).

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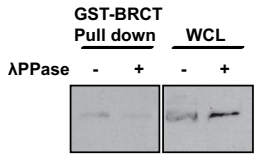
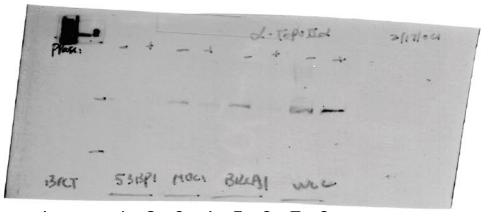
corrected Figure 1b

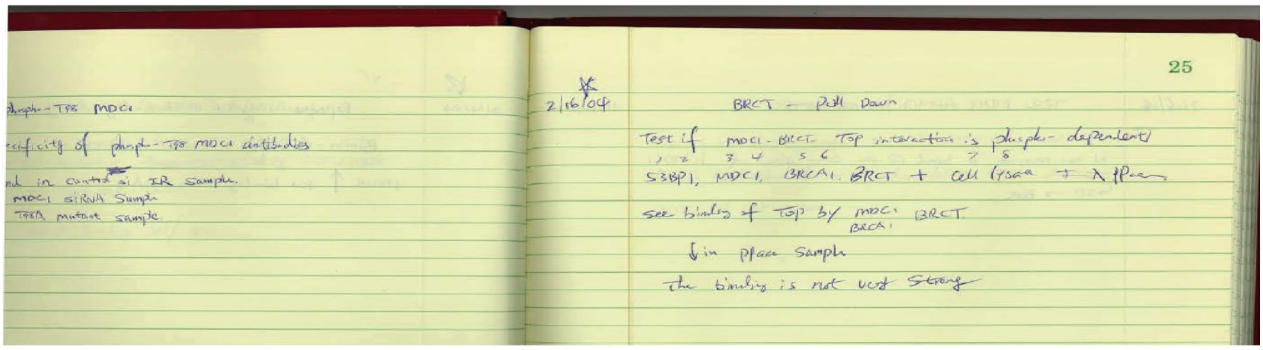


corrected full scan of Figure 1b

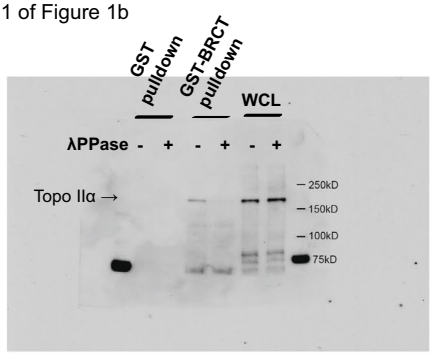


lane 1 2 3 4 5 6 7 8

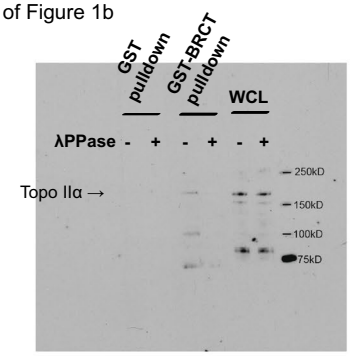
scan of the lab-book



Repeat 1 of Figure 1b

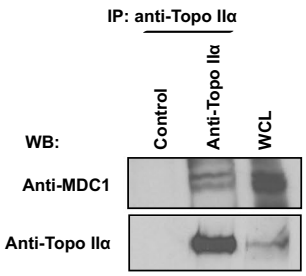


Repeat 2 of Figure 1b

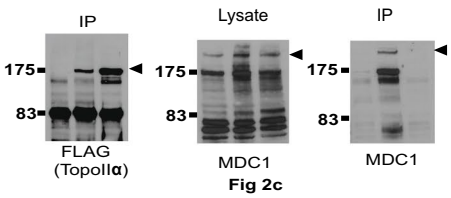


Supplementary Fig. 3

corrected Figure 1d



corrected full scan of Figure 2c



Original and Corrected.