

Author Correction: Plasma cell differentiation and the unfolded protein response intersect at the transcription factor XBP-1

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Figure 1a is intended to show by northern blotting that only IL-4 among a set of six cytokines tested induces expression of *Xbp1* mRNA. A PubPeer posting alleges that the bands representing *Xbp1* mRNA from splenic B cells treated with IL-2 and IL-6 may be identical. It further alleges that the bands representing the *Actg* mRNA loading controls for IL-2 and IL-5 treatment may be identical. Because we cannot retrieve the original source data for this figure, we cannot definitively exclude the possibility of image duplication. However, Fig. 1b and Fig. 1c confirm that IL-4 induces XBP-1 expression in splenic B cells, which is the main message of Fig. 1a. The paper offers no independent demonstration of the specificity of IL-4's effect among this set of cytokines, which is the secondary message of Fig. 1a. Therefore, although the Fig. 1a portrayal of IL-4's specificity must be interpreted with caution, its effect on XBP-1 induction in splenic B cells is confirmed in other panels of Fig. 1, while the overall scientific conclusions of the paper would not be altered by the omission of Fig. 1a.

Figure 1f is intended to show by northern blotting that IL-4 fails to induce the expression of two XBP-1 target genes, *Grp78* and *Chop*, in splenic B cells from STAT6^{-/-} mice, supporting the idea that IL-4 induces active XBP-1 expression via the IL-4 receptor's known signal transduction pathways. A PubPeer posting alleges that the bands representing the *Actg* loading controls for *Grp78* expression in untreated wild-type and STAT6^{-/-} cells are duplicates of the bands for these loading controls from IL-4-treated cells. Because we cannot retrieve the original source data for this figure, we cannot definitively exclude the possibility of image duplication. However, there is no dispute about the other component of this figure, which demonstrates STAT6-dependent induction of *Chop* expression in response to IL-4. Thus, the figure still makes the point that an XBP-1 target gene requires STAT6 for its induction in response to IL-4. Consequently, while the *Grp78* component of Fig. 1f must be interpreted with caution, the overall scientific conclusions of the paper would not be altered by its omission.

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