

PREPARING BLOTS AND GELS FOR PUBLICATION

The journal requires the following information for any figures and supplemental figures that report blot or gel data. The reporting information required in the manuscript, not only supports the journal's aim of ensuring scientific integrity and validity, but it also supports the aim of providing sufficient information for reproducibility. This information is required during peer review and is required before accepting a manuscript.

Supplying raw data for blots and gels

Original, uncropped images should be put into a single Word file or set of files. Images should have minimal adjustment and any adjustment should be noted. This file or set of files should be uploaded as a Supplemental File or set of files and should have "Raw Data" included in the file name(s).

Each image should be clearly labeled and presented in the order they are presented in the manuscript. Raw images should include molecular weight markers and lanes not included in the final figure should be noted. If possible, information about experimental samples and method used to capture the image(s) should be included.

Reporting on blots and gels results in the manuscript

Example images are found at the bottom of this document.

Image Adjustments

- Acceptable image adjustments to the background or contrast include those which do not significantly modify the visibility of data, background, or bands. Unacceptable adjustments are changes to brightness, contrast, color balance, erasing, which alter or misrepresent the information being shown (this includes removal of background or removing non-specific bands, overexposure, and adjusting such that bands bleed into each other).
- It is important to maintain the integrity of the original images. Removal of background noise or adjusting the brightness to eliminate the background is not tolerated. Any adjustments applied must apply to the entire image. Images should include background above and below the bands.
- If there are non-specific bands in the original image, these should be included in the figure and explained in the manuscript text and/or figure legend.

All relevant samples used in comparative analyses should be run on the same blot or gel. If the figure shows the bands in separate panels, this should be noted in the figure legend.

Ideally, control samples should be run on the same blot or gel as the experiment. Relevant controls must be included in each figure.

A figure containing multiple blots or gels should clearly display the different images as separate panels and this should also be noted in the figure legend.

Lanes that are removed from blots or gels or bands that are rearranged should be described in the figure legend.

Quantification of western blots and appropriate statistical analysis must be shown. If there are quantitative comparisons made between samples of different blots or gels, this must be stated in the figure legend and it should also be stated that the experiments were processed in parallel.

The molecular weight for each set of bands should be labeled in figure(s).

Check for duplicate bands. Controls should be different for each experiment and results should not be displayed in more than one figure.

