

# A latex package to label externally-created subfigures

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## 1 The old way of referencing figures

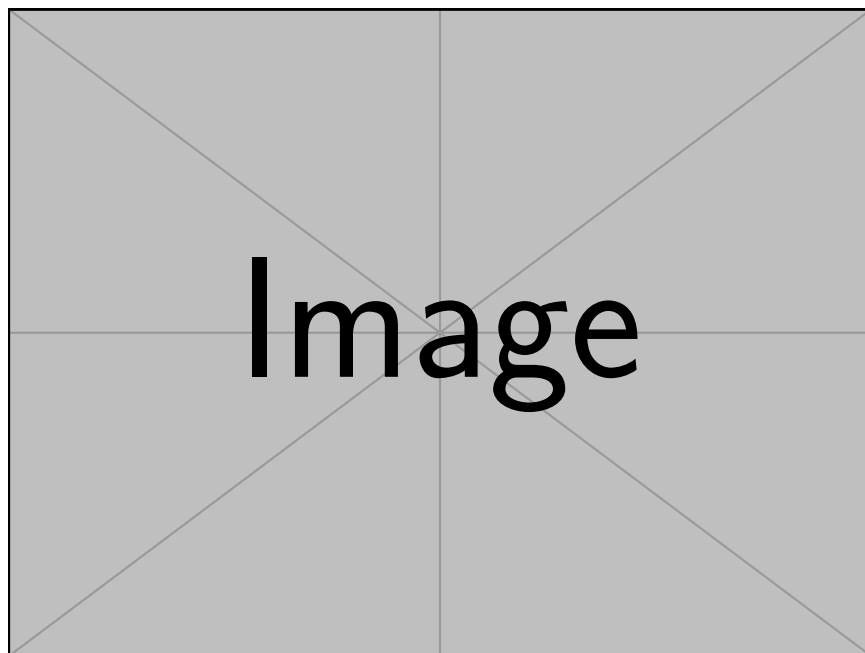


Figure 1: A sentence describing the whole figure, which is about a fictional protein called “oldschoolin”. (A) A family of curves that means nothing on its own. (B) A ribbon diagram of “oldschoolin”.

I would like to refer to the main figure about “oldschoolin”, shown in Figure 1. But this is less informative, and instead I should refer to specific panels. Now, I would like to just refer to the family of curves in Figure 1A. And now, I would like to just refer to the ribbon diagram in Figure 1B. If you need to change the subfigures, you need to change the above references manually.

## 2 The “busyfigure” way to reference figures

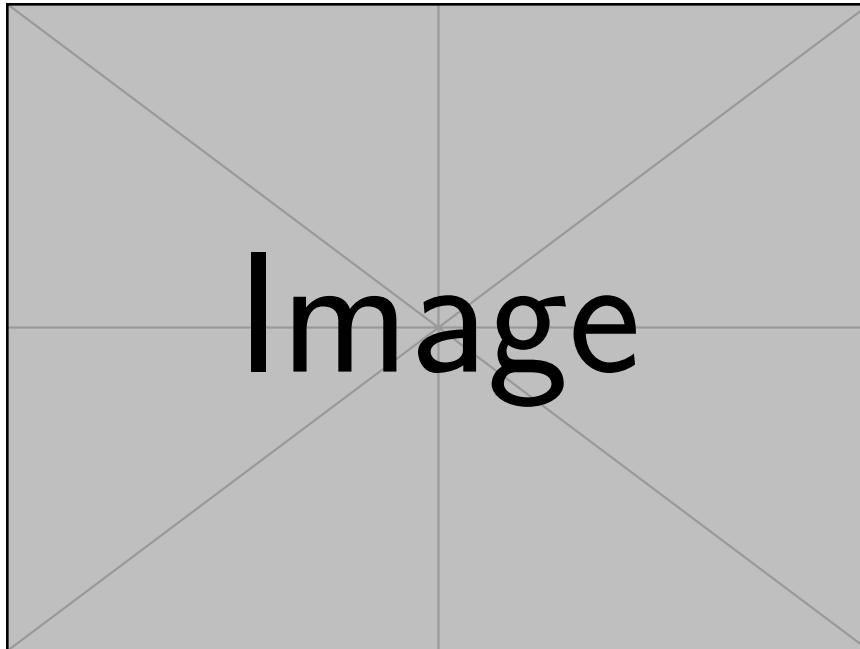


Figure 2: A sentence describing the whole figure. (A) A track that means nothing on its own. (B) A pcolor map that also means nothing on its own. All the data in this figure are scaled by the size of the universe.

I would like to refer to the main figure Figure 2. But this is less informative, and instead I should refer to specific panels. Now, I would like to just refer to the track, Figure 2A. And now, I would like to just refer to the colormap, Figure 2B. These panels are referenced directly, which means that they will automatically update if you move their captions around.

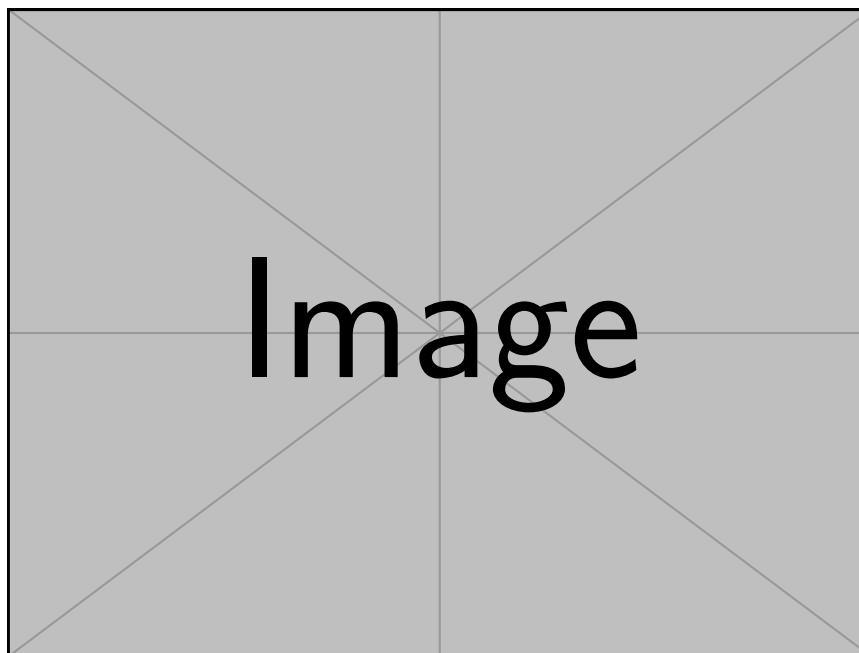


Figure 3: (A) A gel. (B) A heatmap

I would like to refer to the main figure Figure 3. But this is less informative, and instead I should refer to specific panels. Now, I would like to just refer to the gel, Figure 3A. And now, I would like to just refer to the heatmap, Figure 3B.

I would like to refer to the main figure Figure 4. But this is less informative, and instead I should refer to specific panels. Now, I would like to just refer to the schematic, Figure 4A. And now, I would like to just refer to the referee-recommended experiment, Figure 4B.

## Discussion

In the discussion, I will discuss many different subpanels in many different figures. For example, the gel in Fig. 3A, and the schematic in Fig. 4A. Or how about the genomic track in Fig. 2A.

If we move these panels around, all we need to do is change it in the captions (in the `internalsubfigure` lines), and it will automatically change throughout the document!

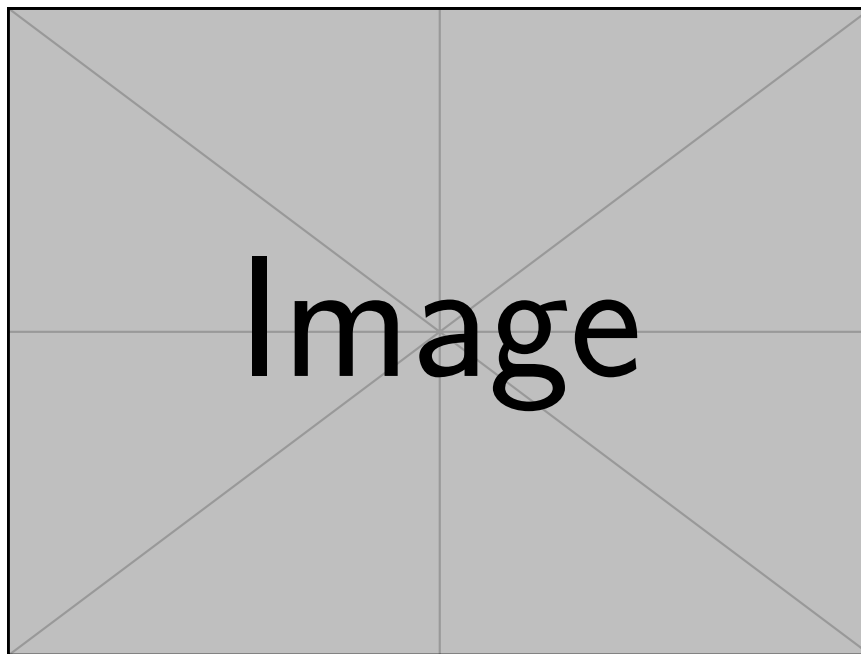


Figure 4: (A) A schematic to show how all the parts fit together (B) A useless and wasteful experiment suggested by Reviewer #3