

## **Protocol Preparation Guidelines**

*(updated on 04/04/2014)*

The main purpose of Bio-protocol is to publish protocols that share expertise not described in sufficient details in the Methods section of literature. It is well known that a summarized bioscience protocol can be hard to repeat. In other words, for experiments using biological systems, details matter. Therefore, protocols published on Bio-protocol are expected to be accurate and contain sufficient details to ensure reproducibility.

Authors are encouraged (but not required) to follow an example of our standard format, which can be found [here](#). Protocols published on Bio-protocol mainly consist of the following 9 sections:

### ***Abstract***

This section should provide just a couple of sentences to establish context and highlight interesting aspects of the protocol.

### ***Materials and Reagents***

Imagine that the reader of the protocol is a novice. This section should provide a detailed list of all materials and reagents required for the successful completion of the experiment. Authors are therefore required to specify manufacturer catalog numbers. Authors may skip catalog numbers that are considered not to be important for the reproducibility of the experiment.

### ***Equipment***

The same goes for equipment. Every piece of equipment used in the experiment needs to be listed along with its specific catalog/model number. Authors may skip catalog/model numbers that are considered not to be important for the reproducibility of the experiment.

### ***Procedure***

Authors are encouraged to list all steps of the protocol chronologically, specifying the time required for critical steps. This makes it easier for readers to follow a protocol accurately.

It is well known that personal notes are crucial for successful experiments. Therefore, authors are strongly encouraged to include their personal notes wherever necessary to increase the likelihood of successfully repeating the experiment.

### ***Representative data (optional)***

Authors are encouraged to provide:

- a. Images and videos (for specific steps) that will aid the reader and improve the visibility and reproducibility of a protocol. For video, a typical smart phone camera is adequate as long as the video is clear and reproducible;
- b. A simple, representative example of data that indicates what type of results to expect;
- c. Notes about reproducibility and variability in your hands.

***Notes (optional)***

This section is for additional notes, technical tips, cautionary points and any extra wisdom that may improve the procedure.

***Recipes***

In this section, authors are requested to be precise about the ingredients they use (e.g. buffer or media) and the conditions they establish for their experiments (e.g. humidity or temperature settings). Note that what may seem like small errors in this section often lead to failure of the experiment.

***Acknowledgments***

Please acknowledge funding sources that have supported the work; if this protocol was adapted or modified from previous work, please also acknowledge the previous work here.

***References***

Authors are requested to include all relevant literature. There is no need to format the reference list, our dedicated editing team will take care of that for you.