

Please submit all manuscripts online at bt.edmgr.com.

Instructions for Authors

MISSION AND SCOPE

BioTechniques is a peer-reviewed journal dedicated to the publication of original laboratory methods, related technical tools, and methods-oriented review articles that are of broad interest to professional life scientists as well as to scientists from other disciplines (e.g., chemistry, physics, computer science) interested in life science applications of their technologies. Since 1983, *BioTechniques* has been the leading peer-reviewed journal for methods-related research. All manuscripts submitted to *BioTechniques* are first evaluated on the basis of scientific quality, originality, appropriateness, contribution to the field, and style. Suitable manuscripts are then subject to rigorous, fair, and rapid peer review.

BioTechniques is dedicated to serving the interests of both authors and readers. No submission, publication, or page fees are levied. As of 2007, *BioTechniques* has eliminated color charges to authors. The journal is committed to broad dissemination of its content and enlists advertiser support to provide print and online versions free of charge to scientists based in North America, Europe, Asia, and the Middle East. The journal maintains its longstanding policy of accepting manuscripts on the basis of scientific merit alone.

Reports describing innovative new methods, substantive modifications to existing methods, and innovative applications of existing methods to new models or scientific questions are appropriate subjects for the journal. Descriptions of technical tools that facilitate the design or performance of experiments or data analysis, such as software and simple laboratory devices, are also welcome.

PEER-REVIEWED ARTICLE TYPES

BENCHMARKS (maximum of 2 journal pages; limit of 1000 words,* 1-2 small figures, no subsections, and about 15 references) are peer-reviewed short communications that offer concise new methods or brief but substantive modifications of existing methods. For manuscripts involving improvements to existing methods, authors must show significantly improved results compared to the standard protocol, or equivalent results with substantial time or cost savings. Benchmarks should contain a short 3-4 sentence Abstract. A summary for review purposes is also required during manuscript submission. Authors are encouraged to provide brief enumerated protocols when appropriate.

REPORTS (maximum of 4 journal pages; limit of 3000 words,* 3-4 small figures, and about 40 references) describe new techniques, materials, and protocols useful in biological and biochemical research laboratories. These peer-reviewed manuscripts should present well-rounded studies reporting either innovative methodological advances or novel modifications to existing methods of substantive value to the field. Reports contain four sections: (i) Abstract, (ii) Introduction, (iii) Materials and Methods, and (iv) a combined Results and Discussion.

REVIEWS (up to 8 journal pages; approximately 6500 words,* 6 figures, and 50-75 references) are surveys of technical approaches related to broad fields of research. Authors should present a balanced perspective on the subject, avoid overemphasis on their own work, and attempt to acknowledge all who have made significant contributions to the field. Reviews are peer reviewed and are generally solicited by the editors, but prospective authors are welcome to submit proposals. Reviews should contain an Abstract.

*Word count is based on the following sections only: Introduction, Materials and Methods, and Results and Discussion.

BIOFEEDBACK

The editors will consider brief letters to the editor and communications concerning previously published papers, including errors, corrections, and additions.

SCHEDULED SECTIONS

BioTechniques regularly publishes sections featuring articles that describe developments in the selected technology fields. Articles are chosen by the editors on the basis of timeliness and appropriateness.

MANUSCRIPT SUBMISSION

All manuscripts must be submitted online at bt.edmgr.com. Assistance with manuscript submission is available via email (bioeditor@biotechniques.com) or by phone (212-520-2757, 9am to 5pm EST Monday to Friday). Submissions include the following items.

COVER LETTER The cover letter (addressed to the Editor-in-chief) must include:

- A brief explanation of the novelty, timeliness, and importance of the report.
- A brief description of the contribution of each author to the reported work.
- Authors are not required to suggest reviewers for their submissions. Authors may, however, provide the names, affiliations, and e-mail addresses of three or more individuals recommended to serve as independent reviewers, if they choose. The suggested reviewers should have expertise on the topic of the report and should have no known competing interest. Authors may also specify individuals whom they wish to exclude from the review process, stating the reason for the exclusion; the editors will attempt to honor requests of this nature if doing so will not impede rigorous review of the manuscript.

MANUSCRIPT

Microsoft Word 2007 Users:

Users should note that manuscripts containing equations created with the Word 2007 default equation editor will be returned to authors due to incompatibilities with our internal software. To avoid this, please continue to use Equation Editor 3.0 (Microsoft Word's legacy equation editor) or MathType equation editor, which can be accessed in Word 2007 from "Insert Object" under the "Insert" ribbon.

Full details on manuscript style and conventions are provided in the Manuscript Format section (p. 4). In brief, manuscript text must be submitted as a Microsoft Word document and should include, in a single file and in the order shown below, the following sections:

	Benchmark	Report	Reviews
Title Page	√	√	√
Abstract	√	√	√
Introduction	combined—no subheads	√	NA
Materials and Methods		√	NA
Results		combined—no subheads	NA
Discussion			NA
Acknowledgments	√	√	√
Competing Interests	√	√	√
References	√	√	√
Tables	as appropriate	as appropriate	as appropriate
Figure Legends	as appropriate	as appropriate	as appropriate

FIGURES Each figure must be submitted as a separate file and should not be embedded in the manuscript text. See figure specifications in Appendix A (p. 10).

SOFTWARE Software and associated documentation should be available on the author's web site for editor and reviewer access at the time of manuscript submission. Authors are required to guarantee the availability of software and documentation for two full years following publication of the manuscript.

SUPPLEMENTARY MATERIAL Any supporting information for online publication only, such as figures, tables, movie files, or supporting data, should be uploaded with the submission in separate files from the main text, figure, and table files.

PROTOCOL All authors are encouraged to submit a detailed working protocol, either accompanying the original submission or after acceptance. See protocol specifications in Appendix C (p. 12).

ADDITIONAL MATERIAL FOR REVIEW In order to facilitate the review process authors should provide additional information (e.g., reprints, related manuscripts under review or in press, etc.) at the time of submission, when appropriate.

MANUSCRIPT FORMAT

Text should be double-spaced, without text justification or word hyphenation. To assist review and copy editing, page and line numbering must be provided throughout the document.

The manuscript should be succinct, well organized, and clearly written. Standard terms, abbreviations, and nomenclature should be used. Jargon should be avoided. All abbreviations, symbols, and acronyms should be defined and/or spelled out the first time that they appear in the text, unless they are so well known and standardized that no ambiguity is possible (e.g., PCR). An abbreviation may then be used throughout the remainder of the article. Standard American spelling must be used.

TITLE PAGE The title page must include:

- The full title, which should be informative, explicit, and concise (200 characters or fewer, shorter for Benchmarks). Ambiguous terminology and overused trivial adjectives (e.g., novel, rapid, efficient, inexpensive, or their synonyms) should be avoided. The use of numerical values, abbreviations, acronyms, and trademarked or copyrighted product names is discouraged.
- The full name(s) of the author(s) with the official names of each author's affiliation, and the name and full address (including e-mail) of the author to whom readers should direct requests for reprints and other inquiries about the article. This individual need not be the same person designated as the corresponding author within the Editorial Manager online submission system.
- Carefully selected key words (3-8) for indexing purposes.
- Word count for the Abstract.
- Word count for the body of the manuscript (excluding title page, acknowledgments, competing interests statement, references, tables, and table and figure legends).

ABSTRACT (*Benchmarks, Reports, , Reviews, only*) The Abstract should be a single paragraph (no more than 200 words; 150 words for Benchmarks) with background information limited to one or two introductory sentences followed by a concise summary of the report. It should be written for the general readership, stand alone, and be suitable for use by abstracting services. Abbreviations, jargon, and literature citations should be avoided.

INTRODUCTION (*Reports and Reviews only*) The Introduction should summarize briefly the background of the method and state clearly the nature, significance, and novelty of the reported technique in the context of existing methodology. Authors should conduct literature searches for antecedent papers and patents, using citations from primary sources whenever possible. Because procedures described in *BioTechniques* frequently serve as templates for adaptation to alternate model systems or scientific questions, the general applicability of the technique should be addressed here. Results should not be reported or summarized in the Introduction.

MATERIALS AND METHODS (*Reports only*) This information is especially important in a methods journal. It should contain detailed experimental protocols for new procedures, but previously published methods should be cited rather than described. Authors should specify the sources of any special materials, such as reagents, cell lines, expression vectors, and software. Trade names of commercial products should be checked for accuracy. Vendors or manufacturers of materials should be specified, and vendor or manufacturer location (city, state or province, and country) should be included in parentheses after the first mention of the material in the text. Refer to the vendor's or manufacturer's web site for current company names and the use of product trade names. Whenever appropriate, authors are encouraged to refer to a separate table consisting of a comprehensive, enumerated protocol written in the present tense. Information in protocols should not be repeated elsewhere in the text; however, a more detailed protocol can be submitted as supplementary material (see **APPENDIX C: PROTOCOL SUBMISSIONS**).

RESULTS AND DISCUSSION (*Reports only*) This section should provide a description of data presented in tables and/or figures, interpretation and discussion of the results, and conclusions.

ACKNOWLEDGMENTS All funding sources and donors of materials (instruments, reagents, etc.) used in the study, as well as individuals who contributed to the work but do not meet the criteria for authorship, should be acknowledged here. If your research is supported by NIH funding, please add "This paper is subject to the NIH Public Access Policy." as the last sentence of the Acknowledgments section.

COMPETING INTERESTS STATEMENT Authors should briefly state any competing interests (see the journal's competing interests policy, p. 7). If no competing interests exist, the following sentence should be inserted into the text: "The authors declare no competing interests". A signed "Statement of Competing Interests" form will be required if a revised manuscript is requested.

REFERENCES Only articles and patents that have been published and indexed should be included in the literature citations. Papers that have been accepted but not yet published can be designated as "in press." Prior reports that underlie the current work must be acknowledged by appropriate citations; authors should conduct literature searches for antecedent papers and patents, using citations from primary sources whenever possible. Non-archival poster or oral presentations, and papers that have not yet been accepted, may not be cited. URLs, when included as sources, should be cited in the text only. If no other suitable references are available, product literature may be cited as an in-text URL. Unpublished observations and personal communications should be in the text only. Written permission for personal communications or unpublished observations of third parties must be provided. Footnotes are not to be used. Accepted journal abbreviations can be found in the National Library of Medicine's downloadable "List of Serials Indexed for Online Users" (www.nlm.nih.gov/tsd/serials/lsiou.html) or by searching the PubMed Journals Database (www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=journals). References should be enumerated in order of appearance in the text, and referenced by number in the text. The reference format should conform to the examples that follow. For publications with ten or more authors, list only the first eight names followed by "et al."

Periodical:

1. **Clark, J., T. Shevchuk, P.M. Swiderski, R. Dabur, L.E. Crocitto, Y.I. Buryanov, and S.S. Smith.** 2003. Mobility-shift analysis with microfluidics chips. *BioTechniques* 35:548-554.

Book:

1. **Ellingboe, J. and U.B. Gyllensten.** 1992. *The PCR Technique: DNA Sequencing.* Eaton Publishing, Natick, MA.

Chapter in book:

1. **Todd, R., J.S. Gutkind, E.J. Shillitoe, and D. Wong.** 2002. Solid tumors: microarray analysis of oral cancers, p. 139-153. In J.A. Warrington, R. Todd, and D. Wong (Eds.), *Microarrays and Cancer Research.* Eaton Publishing, Westborough, MA.

Software:

1. If specific software developed by another researcher has been used, cite the original article where the software is introduced. For example, if PHRED software was used, include a citation number in the text and add “**Ewing, B., L. Hillier, M.C. Wendl, and P. Green.** 1998. Base-calling of automated sequencer traces using phred. I. Accuracy assessment. *Genome Res.* 8:175-185” to the reference list. Remember to renumber the citation throughout the text and in the reference list, as necessary.

2. If a free or open-source web-based program is used, a website address included in inline parentheses is acceptable. For example: “We used the NCBI BLAST database to sequence... (<http://blast.ncbi.nlm.nih.gov/Blast.cgi>).” Do not include the software on the reference list.

3. If referencing software purchased by the affiliated institution, include the manufacturer’s name, city/state, and country. For example: “We developed a program using Matlab software (The MathWorks, Natick, MA, USA).” Do not include the software on the reference list.

TABLES Tables should be numbered consecutively and include a concise title and a brief legend, if appropriate. Each table should appear on a separate page and should be double-spaced and numbered consecutively. Acceptable table formats are Microsoft Word and Excel.

Table specifications:

- Table title: no cell; bold black text
- Table heading: black cell; bold white text
- Table text: alternating rows of white and gray; black roman text; no black borders between cells
- Entire table should have one thick black border
- Legend should always have a white background and be separated from other cells with a black line above

Note: The above can be modified (adding cell borders or using multiple grays) in cases where there are multiple headings, unclear rows/columns, etc.

Table template example:

Table 1. Summary Statistics for the Moa_MS2 Microsatellite Locus

Species	Size range (bp)	n	N_A	N_E	F_{IS}	Heterozygosity	
						H_O	H_E
South Island giant moa (<i>D. robustus</i>)	110–136	31	10	3.1	0.143	0.581	0.677 ± 0.089
Stout legged moa (<i>E. gravis</i>)	110–128	11	8	5.8	0.230	0.636	0.826 ± 0.145
Heavy footed moa (<i>P. elephantopus</i>)	106–110	10	2	1.9	0.167	0.400	0.505 ± 0.155

Characteristics of the microsatellite locus Moa_MS2 that was optimized for use in three extinct Moa species, including the South Island giant moa (*D. robustus*), stout-legged moa (*E. gravis*) and the heavy-footed moa (*P. elephantopus*). Descriptive measures include *n*, the number of individuals; N_A , number of alleles; N_E , effective number of alleles; H_O , observed and H_E , expected heterozygosity and F_{IS} , Wright's fixation index as a measure of heterozygote deficiency/excess.

FIGURE LEGENDS Figure legends should be double-spaced and constitute a concise and complete description of the data that appears in the figure, using abbreviated style and avoiding redundancy with the details reported under Materials and Methods, or elsewhere in the manuscript. The first sentence of the figure legend should function as a brief, stand-alone title to the figure. It should not contain specific panel references. If figures (e.g., for a review article) have been published previously, written permission for reproduction must be obtained from the copyright holder and full credit must be given in the figure legend. Only standard symbols should be used and these should be in a key incorporated within the figure or defined in the figure legend. If the figure consists of panels, each part should be designated by an unpunctuated uppercase letter in the top left-hand corner, and should be referred to in the legend as (A), (B), (C), etc.

AUTHORSHIP

All individuals listed as authors must have had substantive roles in the reported work, and all individuals who contributed substantively must be included as authors. It is the responsibility of the corresponding author to ensure that these conditions have been met, and that all authors have read and approved the final version of the manuscript. If an individual contributed to the manuscript but does not meet the authorship criteria, that person should be named in the Acknowledgments. Prior reports that underlie the current work should be acknowledged by citations. Unpublished work by third parties that was used in the project must also be cited, and letters of permission from third parties must be provided at the time of manuscript submission.

CONDITIONS OF SUBMISSION

A manuscript is submitted with the implicit understanding that neither it nor the essence of its content has been published in whole or in part and that it is not being considered for publication elsewhere. The only exception to this policy is made for authors who have deposited a preprint of their manuscript at an appropriate public archive, such as arXiv (arxiv.org). Authors agree to honor reasonable requests from interested scientists for provision of materials necessary to reproduce the method described. Newly reported sequence (including plasmid sequences), structural, and primary microarray data must be deposited in the appropriate public database/repository (see Appendix B on p. 11) and valid accession numbers provided in the text of the manuscript. Microarray data must be provided in a MIAME-compliant format (further information available at www.mged.org/Workgroups/MIAME/miame_checklist.html). Limited data that are presented only for validation of the method need not be submitted to such archives. For research involving human and animal subjects, manuscripts must include a statement indicating that the research complied with all relevant laws, guidelines, and policies. Research using human subjects must also include a statement confirming that informed consent was obtained. Hazards of materials or procedures used in the report must be disclosed if they are not self-evident.

COMPETING INTERESTS POLICY

Authors and reviewers have an obligation to recognize and disclose competing interests (conflicts of interest) that have the potential to bias their judgment in the course of carrying out their responsibilities, or which could be reasonably perceived to bias judgment. Readers are entitled to be informed of authors' real or potential conflicts of interest for consideration when assessing the information presented in a published article. The existence of competing interests is a set of circumstances and is not indicative of the existence of bias; however, the perception of bias on the part of readers can be as damaging to the perception of the scientific integrity of an article as actual bias.

Competing interests can be of a financial, professional, or personal nature. Financial conflicts of interest are relationships (such as employment, consultancy, stock ownership or options, grants or patents received or pending, royalties) with an individual or entity that has a financial interest in or a financial conflict with the subject matter or materials discussed in the manuscript. Personal and professional conflicts include relationships with individuals or entities that are in a position to be negatively or positively impacted by the publication of a particular manuscript.

All authors and reviewers are required to provide a statement that discloses any competing financial, professional, or personal interests which have the potential to bias their judgment, or which could be reasonably perceived to bias judgment, or, if no such interests exist, to provide a statement to that effect. Authors should include this information in the Competing Interests Statement section of the manuscript. Information disclosed by reviewers will remain confidential.

PROCESS OF SUBMISSION, REVIEW, ACCEPTANCE, AND PUBLICATION

Receipt of manuscripts is acknowledged by email. Manuscripts are given an initial review by the Editor-in-Chief. If manuscripts are clearly inappropriate, lacking in originality, of poor quality, deficient in the use of the English language or of limited interest to the readership, they are rejected at this stage. Other manuscripts are ranked according to priorities determined by the editors, and many are returned without further review even if they are of high quality.

Qualified independent referees review manuscripts anonymously and confidentially. Manuscripts are evaluated for originality, scientific quality, style, and contribution to the field.

The average time to first decision is approximately four weeks. In all cases, the editorial office will make every effort to ensure that reviewers' comments and the editor's decision are returned within six weeks of manuscript receipt. If a request for revision is made, authors should fully address the recommendations made by the editor and reviewers. A "Response to Editor and Reviewers," which explicitly addresses each point made by the editor and reviewers, should accompany any revised manuscript. All revisions, and their location in the manuscript, should be noted in the Response. Manuscripts should be revised and resubmitted within 90 days; manuscripts not revised within this time period will be considered "withdrawn" and removed without notice from the manuscript processing system.

Authors of rejected manuscripts may appeal the editor's decision if the authors believe the decision was based on errors on the part of the editor or reviewers. Rebuttal letters should be sent to bioeditor@biotechniques.com to the attention of the Editor-in-Chief. All rebuttals will be addressed within six weeks of receipt of a letter of rebuttal. If the Editor agrees to reconsider a rejected manuscript, the author may be sent additional editorial recommendations that were not stated at the time of rejection. A revised manuscript should not be sent at the time of rebuttal.

The editors will attempt to publish articles within six months of receipt and three months of acceptance. Submission and acceptance dates are published with all Benchmarks and Reports.

Page proofs are sent by email to the designated corresponding author. This is the only opportunity for authors to make corrections. Limited changes are allowed at this point. All manuscripts are copyedited and authors must confirm the validity of the copyediting to correct errors that may have been incorporated at this stage.

Inquiries about reprints should be directed to christine.briglia@informausa.com. Color reprints are quoted on an individual basis. Authors wishing to order color reprints may consider ordering extra copies of the printed journal as a less expensive alternative; such requests must be made in advance of receipt of the page proofs.

CONDITIONS OF ACCEPTANCE

In June 2007, *BioTechniques* began moving towards implementing a [licensing agreement](#) for authors. Rather than relinquishing copyright, *BioTechniques* authors are now only required to provide the journal with a license to publish their papers. The license does not restrict how authors can reuse their work; however, it does require that the work is properly attributed to the original publication.

A manuscript is accepted only when all authors have signed an affirmation of originality statement and either a licensing agreement or a statement of exemption because of government employment, and a disclosure of relevant competing interests. In certain cases, an agent of the author's employer may sign on behalf of the authors. All manuscripts are considered confidential and are not to be made available to the press or public prior to publication without permission from the Editorial Director; however, authors may present their work at professional meetings.

DEPOSIT OF NIH-FUNDED RESEARCH TO PUBMED CENTRAL

While we expect in the near future to make deposits of NIH-funded papers in accordance with the [NIH Public Access Policy](#) on behalf of our authors, until that system is in place, authors affected by the policy should submit papers through the [NIH Manuscript Submission system \(NIHMS\)](#). We ask that authors specify a 6-month hold period on posting of the paper. For further details and instructions visit <http://publicaccess.nih.gov>.

Going forward, all NIH-funded papers published by *BioTechniques* will include the line “This paper is subject to the NIH Public Access Policy” at the end of the Acknowledgments section.

VIOLATIONS OF CONDITIONS OR POLICIES

Authors who violate the conditions of submission or acceptance or the authorship policies are subject to editorial action including but not limited to disclosure of violations to employers or funding agencies or publication of a retraction, correction, or editorial detailing the violation.

COVER ART

The journal welcomes submission of images to be considered for use on the cover of *BioTechniques*. Cover candidates should be images of high scientific quality and aesthetic appeal, accompanied by a caption of up to 50 words. Covers do not have to be associated with a manuscript, although some preference will be given to those that are. Image submissions should be original source, high-resolution (300 dpi, CMYK) files. Candidate images can be submitted together with a manuscript at bt.edmgr.com or alone to the Cover Coordinator at bioeditor@biotechniques.com. Images used on the cover of *BioTechniques* are entered in the annual cover competition, in which one winner is selected by readers and awarded a \$1000 cash prize.

APPENDIX A: *BIO*TECHNIQUES FIGURE REQUIREMENTS

GENERAL REQUIREMENTS:

- Submit original source files when possible.
- The physical image size of each figure must not have any dimension smaller than 3 inches.
- Pixel-based images must be of high resolution:
 - 300 dpi minimum for photographs without text;
 - 600 dpi minimum for photographs with text;
 - 1200 dpi minimum for images with text and lines.
- Color settings must be CMYK (except for files created in Microsoft PowerPoint, Word, or Excel). RGB graphics are unsuitable for the 4-color printing process used. Because colors will change slightly when graphics are converted from RGB to CMYK, authors must make the conversion themselves to ensure color accuracy of scientific data.
- Please adhere to the following guidelines when creating figure labels:
 - Panel ID labels (e.g., A, B, C) should not overlap the image, if at all possible. If they must overlap the image, they should be created in a separate, editable layer;
 - Use periods rather than commas for decimal point notation (e.g., 3.87 rather than 3,87);
 - Insert a single space between number and units (e.g., 2 mm);
 - Use commas in numbers containing five digits or more (e.g., 10,000);
 - Do not use commas in numbers containing only four digits (e.g., 1000);
 - Maintain consistency in uppercase/lowercase text labels;
 - Italicize genes.

PREFERRED FILE FORMATS:

TIFF	<ul style="list-style-type: none"> • If the figure consists of a photograph only, it must have a resolution of 300 dpi. If the photograph is annotated, the resolution must be 600 dpi. • If a figure consists of text and the lines only, a TIFF is unlikely to be suitable. If a TIFF must be used, the resolution must be at least 1200 dpi. 	<i>Preferred format for photographs</i>
PDF	<ul style="list-style-type: none"> • Fonts must be embedded. • Distill with Print or Prepress job option settings. 	<i>Preferred format for line art (figures with text and lines only, such as flow charts or diagrams)</i>
EPS	<ul style="list-style-type: none"> • Fonts must be embedded. 	
PSD	<ul style="list-style-type: none"> • Adobe Photoshop document format (.psd) is appropriate only for photographs (with/without text labels). Figures should be 300 dpi and CMYK 	<i>Acceptable format for photographs</i>

ACCEPTABLE FILE FORMATS:

PowerPoint/ Word	<ul style="list-style-type: none">• If the figure contains a photograph, authors must also provide the original image file(s) in one of the non-Microsoft file types listed above. This is necessary because PowerPoint and Word are not designed for presentation of high-resolution graphics.• PowerPoint and Word files do not lend themselves to color accuracy; if precise color is necessary, the figure should be prepared in another application.
Excel	<ul style="list-style-type: none">• Graphs may be submitted in .xls format.• Colors in graphs may change when printed; therefore, if it is necessary to identify items by color, authors should consider providing an in-figure key rather than referring to colors by name.

Unacceptable formats include JPEG, GIF, and PNG. Any low-resolution graphic from the web will be of insufficient quality. Increasing the resolution (dpi) of a graphic in a program such as Photoshop will not yield acceptable results. For example a 72 dpi graphic that is saved as a 300 dpi graphic will not reproduce well and will be rejected.

APPENDIX B: PUBLIC DATABASES AND REPOSITORIES

SEQUENCE:

NUCLEIC ACIDS

GenBank	
<i>Homepage</i>	www.ncbi.nih.gov/Genbank/index.html
<i>Submissions</i>	www.ncbi.nih.gov/Genbank/submit.html
EMBL	
<i>Homepage</i>	www.ebi.ac.uk/embl/index.html
<i>Submissions</i>	www.ebi.ac.uk/embl/Submission/webin.html

PROTEIN

UniProt	
<i>Homepage</i>	www.expasy.uniprot.org/index.shtml
<i>Submissions</i>	www.ebi.ac.uk/swissprot/Submissions/spin/index.jsp

MICROARRAY

Gene Expression Omnibus (GEO)	www.ncbi.nlm.nih.gov/geo
ArrayExpress	www.ebi.ac.uk/arrayexpress
CIBEX	cibex.nig.ac.jp

STRUCTURE:

NUCLEIC ACID

Nucleic Acid Database (NDB)	ndbserver.rutgers.edu
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PROTEIN

Worldwide Protein Data Bank (wwPDB)	www.wwpdb.org
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Authors who describe a new plasmid are also encouraged to deposit a DNA aliquot or the corresponding glycerol stock in the Addgene plasmid repository (addgene.org).

APPENDIX C: PROTOCOL SUBMISSIONS

Submitting a protocol with your manuscript is an ideal way to ensure that other researchers fully benefit from your technique. We encourage all authors to consider submitting a detailed working protocol, either accompanying the original submission, after acceptance, or as a stand alone research tool.

GENERAL REQUIREMENTS:

Protocols should be submitted as original Microsoft Word documents created in your laboratory in connection with the preparation of your manuscript. Please note that we cannot accept protocols that have also been prepared for distribution by a manufacturer with a commercial product. If your protocol is submitted with your manuscript, be sure to mention the online availability of the protocol in the text of your manuscript. Each protocol should be detailed and organized so that a researcher could print out the protocol and perform the experiment using only that document. Feel free to include any commentary, hints, data tracking systems, charts, etc. that you find useful when carrying out the experiments.

Protocols that do not accompany manuscript submissions are also welcome and will be considered for our annual Protocol Guide and online publication. Protocols should follow the format described below.

PROTOCOL FORMAT:

Protocols should be formatted to include the following sections (where applicable):

REAGENTS Please list all of the reagents used in performing the experiment and the vendor name and location. For reagents that are unusual or difficult to find, please also include a catalog number. Reagents that are purchased ready-to-use should be listed in this section.

PROCEDURE Include the title of each major step (such as tissue collection, cell lysis, neutralization, precipitation, etc.) as a heading with each task numbered below. Numbers should be continuous throughout the procedure. For example, the first heading may include steps 1-4 and the second heading steps 5-7. An example of a protocol in the approved *BioTechniques* format may be seen [here](#).

- *Helpful hints:* Provide any commentary or hints that will help the investigator correctly perform the experiment.
- *Attention:* Draw attention to any critical steps with specific instructions on the correct procedure, what makes this step critical, and what to do to ensure success. Is it dependent on timing, dilution, speed, temperature, etc.?
- *Rest:* Please note any steps where the experiment can be stopped, the duration that it can be held (overnight, 2 h, etc.), and instructions for properly holding (4°C, with shaking, in the dark, etc.).

Symbols for each of these subheadings may be copied and pasted from the [Protocol Template](#) (see p. 14).

FIGURES AND TABLES Figures, graphs, charts, etc. that you find useful when conducting the procedure are welcome. They must be included as separate files and adhere to our [Figure Requirements](#). Tables should be created in Microsoft Word and included as part of the protocol text.

RECIPES List the recipes of all solutions made in the laboratory. Reagents purchased ready-to-use do not need to be listed in this category, but all purchased reagents that require modification (such as dilution or addition of β -mercaptoethanol) should be listed here.

TROUBLESHOOTING If known, please list common problems, possible causes, and methods of correction. This can be submitted as a table or listed in the text.

EQUIPMENT List all equipment used with the accompanying vendor name. Upon first mention in the text, also include the vendor's location (city/state and country). Include catalog numbers for equipment that may be difficult to find.

REFERENCES List all necessary references in the same format detailed in the [Instructions for Authors](#).

These are guidelines for structuring your document, but not all categories may apply. Feel free to eliminate those sections that are not applicable to your protocol.

When submitting a new or revised manuscript, protocols in Microsoft Word format can be uploaded online at bt.edmgr.com along with your manuscript files by selecting "protocol" as the item type. Assistance with submission is available by email (bioeditor@biotechniques.com) or by phone (212-520-2757, 9am to 5pm EST Monday through Friday).

Protocols that do not accompany a manuscript submission can be sent directly to bioeditor@biotechniques.com.

PROTOCOL TEMPLATE:

Protocol Title

PROTOCOL FOR:
Manuscript Title

Authors
Affiliations

BioTechniques Vol#:pp-pp (Month Year)

LEGEND

 **ATTENTION**

 **HINT**

 **REST**

REAGENTS

Product (Vendor, City, State, Country)

Product (Vendor, City, State, Country)

Product (Vendor, City, State, Country)

Product (Vendor, City, State, Country)

Uncommon product (Vendor, City, State, Country, Catalogue number)

PROCEDURE

HEADING 1

1. Step 1
2. Step 2
3. Step 3
4. Step 4

 **HINT:** *Tip to ensure success at this point in the protocol*

HEADING 2

5. Step 5
6. Step 6
7. Step 7

HEADING 3

8. Step 8
9. Step 9
10. Step 10
11. Step 11
12. Step 12
13. Step 13

 **ATTENTION:** *Include critical information*

HEADING 4

14. Step 14
15. Step 15
16. Step 16
17. Step 17

 **REST:** *Include instructions for storage of materials*

HEADING 5

18. Step 18
19. Step 19
20. Step 20
21. Step 21
22. Step 22

HEADING 6

23. Step 23
24. Step 24
25. Step 25

TABLES/FIGURES

Include any tables, figures, or data tracking systems that you find useful when conducting this experiment

RECIPES

Recipe 1 (total volume)

* *Tips for success in making the solution*

Ingredient 1	volume	final concentration
Ingredient 2	volume	final concentration
Ingredient 3	volume	final concentration
Ingredient 4	volume	final concentration

Instructions for combining ingredients

Recipe 2 (total volume)

Ingredient 1	volume	final concentration
Ingredient 2	volume	final concentration

Instructions for combining ingredients

Recipe 3 (total volume)

Ingredient 1	volume	final concentration
Ingredient 2	volume	final concentration
Ingredient 3	weight	final concentration
Ingredient 4	volume	final concentration

Instructions for combining ingredients

TROUBLESHOOTING

PROBLEM

Possible cause and solution
Possible cause and solution
Possible cause and solution

PROBLEM

Possible cause and solution
Possible cause and solution

EQUIPMENT

Product (Vendor, City, State, Country)

Product (Vendor, City, State, Country)

Uncommon product (Vendor, City, State, Country, Catalogue number)