

FOR AUTHORS

AIMS and SCOPE

The Microbiology and Biotechnology Letters (MBL) is a journal devoted to the advancement and dissemination of scientific knowledge concerning microbiology, applied microbiology, biotechnology, bioprocess and related academic disciplines. It covers five scientific and technological categories: Food Microbiology (FM); Microbial Biotechnology (MB); Fermentation Microbiology (FM); Environmental Microbiology (EM); Molecular and Cellular Microbiology (MCM), Genome Reports. (the subcategories are available in detail online at https://www.mbl.or.kr/content/about/aims_and_scope.html). The MBL is published and distributed as a regular quarterly issue on the 28th of March, June, September and December each year. A free access journal, including full-text articles, is available for download free of charge on the journal's website (<http://www.mbl.or.kr>).

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Ethics

All research involving human subjects must be performed in accordance with the ethical standards given in the Declaration of Helsinki and the research protocol must be approved by the author's institutional review board (IRB) prior to experiments. Experiments involving animals must be conducted in accordance with institution's or national research council's guidelines for the care and use of laboratory animals and must be approved by the author's institutional animal care and use committee (IACUC). Details of the ethical approval status of the research must be described in the Materials and Methods section of the manuscript, including the IRB and/or IACUC approval number. Ensure correct use of the terms sex (when reporting biological factors) and gender (identity, psychosocial or cultural factors), and unless inappropriate,

report the sex and/or gender of study participants, the sex of animals or cells, and describe the methods used to determine sex and gender. If the study was done involving an exclusive population, for example in only cases (e.g., prostate cancer), authors should define how they determined race and ethnicity and justify their relevance. Authors should submit a document indicating approval of the research when submit the revised version of the manuscript.

Authorship

It is expected that the credit for authorship should be recognized based on the four criteria below: (1) substantial contributions to conception and design, acquisition of data, and analysis and interpretation of data; (2) drafting the article or revising it critically for important intellectual content; (3) final approval of the version to be published; and (4) agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. The corresponding author must provide author contribution statements in the manuscript. The corresponding author is also responsible for having ensured that all the listed authors have agreed to all of the contents, including the author list and author contribution statements, and have approved the manuscript submission to the journal, and for managing all communication between the journal and all co-authors, before and after publication.

Conflict of interest

Journal of Microbiology and Biotechnology requires that all authors disclose any potential sources of conflict of interest. Any interest or relationship, financial or otherwise, that might be perceived as influencing an author's objectivity is considered a potential source of conflict of interest. These must be disclosed when directly relevant or indirectly related to the work that the authors describe in their manuscript. Potential sources of conflict of interest include but are not limited to patent or stock ownership, membership of a company board of directors, membership of an advisory board or committee for a company, and consultancy for or receipt of speaker's fees from a company. The existence of a conflict of interest does not preclude publication in this journal. If the authors have no conflict of interest to declare, they must also state this at submission. It is the responsibility of the corresponding author to review this policy with all authors and to collectively list in the manuscript (under the Acknowledgment section).

Sequence data

Manuscripts reporting new nucleotide and amino acid sequences should be accompanied by substantial additional experimentation to characterize the gene(s) and product(s) concerned, and/or substantial comparable analysis. A sequence alone is unlikely to be acceptable. Papers reporting new sequence data will not be published unless the sequence has an accession number from a recognized nucleotide database. GenBank/EMBL/DDBJ accession numbers should be included in the manuscript no later than the modification stage of the review process. The accession numbers should be included in a separate paragraph at the end of the Materials and Methods for Articles or at the end of the text for Notes (e.g., The GenBank/EMBL/DDBJ accession number of the sequence reported in this paper is A00000). Authors should follow "Sequence data format" (below) for preparation of nucleotide and amino acid sequence diagrams.

Page charges

Under the acceptance of publication, the page charge is US\$30 (₩30,000) and US\$50 (₩50,000) per each printed page, for active KMB members and non members in Korea, respectively. The whole charge for overseas authors is US\$50 per manuscript. A bill for page charges will be sent with the galley proofs. The online version of the manuscript provides color figures free of charge while the print version will be produced in black-and-white.

Editorial review and revision

All papers will be critically read by at least two or three peer-reviewers, selected for their competence in the subject area of the paper. Acceptance of the paper will depend upon its scientific merit and suitability for the journal. A paper may be accepted in its original form or subject to revision.

The reviewers' (and editor's) suggestions will be conveyed to the author, who will then have an opportunity to revise the paper. If a manuscript returned to an author for revision is held for longer than two months, or if revision is sufficiently extensive, then the date of receipt of the revised manuscript will be substituted for the initial date of receipt.

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Galley proofs (PDF format) for an accepted article will be sent by e-mail to the corresponding author for copyediting corrections. The core content of an article cannot be changed during galley proof reading. It is the author's responsibility to check the entire manuscript, including tables, figure legends, and cited reference numbers, not just items queried. The proofs should be corrected and mailed to the Editorial office within 48 h of receipt in order to expedite publication. Only one set of corrections will be accepted. This means it is important to ensure all of your corrections are sent to us in one communication.

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Membership in the KMB is not a prerequisite for submission and consideration of manuscripts. Authors are requested to submit their manuscripts electronically by using the **MBL online manuscript submission system** available at <http://www.mbl.or.kr>. This site will guide authors stepwise through the submission process. The editorial office will acknowledge receipt of your manuscript within 24 hours of submission. Please contact the editorial office (mbl@mbl.or.kr) if you do not receive confirmation within this period of time. The "date of receipt" that appears in the published paper will be the date when the handling managing editor received the manuscript.

Revisions

Papers may be returned to authors for revision. Authors will be given eight weeks after receipt of the reviewers' comments to revise their paper. Revisions must be submitted via the online submission system, under the heading "Submit Manuscript Online." Click on the link "Submit a revised manuscript" then upload your revised files. Please do not submit the revision via email.

Resubmissions

Papers may be rejected but the authors are encouraged to resubmit the paper after additional experimental data are obtained. Resubmissions must be submitted via the online submission system under "Begin a new submission." The paper must be marked as a resubmission and list the handling editor and manuscript number of the original submission, in the cover letter. Please also provide a letter giving point-by-point responses to the referees of the previous version.

FILE FORMATS

Prepare the text in Microsoft (MS) Word (6.0 or later version) or hwp or WordPerfect. Set the page size to have 2.5 cm margins on

all sides. The font size should be no smaller than 12 points. Type every portion of the manuscript double spaced, including References and figure legends, and number all pages in sequence, including the abstract, figure legends and tables. The last two items should be placed after the Reference section. Manuscripts written in English should contain the title, author name(s), author affiliation(s) and the abstract in Korean following the Reference section. However, foreign authors are exempted. Korean papers should contain the title, author name(s), author affiliation(s) and the abstract and keywords in English and put Korean abstract after Results and Discussion section.

Manuscript pages should have line numbers. The text of your manuscript (including title page, abstract, main text, references, and figure legends) followed by tables and figures should be in a single word file for initial submission. Each figure should be labeled with a figure number. Standard fonts (Times New Roman, Times, or Courier), preferably Times New Roman should be used for the generation of text and Arial or Helvetica for the figures. Use the Symbol font and the "Insert Symbol" option from the menu bar for introducing symbols in MS Word. Authors can upload their articles as MS Word (6.0 or a later version) or hwp. Authors must then check the PDF conversion carefully to make sure that everything converted properly. This format is acceptable for reviewing purposes only. If your paper is accepted, you are then required to send the final version as source files including a separate Word file for text and graphic TIFF or EPS files. Manuscripts that do not follow the "File Formats" and "Organization and Styles of Manuscripts" (below) are not suitable for editorial review or publication, and will be returned to the author.

ORGANIZATION AND STYLES OF MANUSCRIPTS**I. Articles**

Articles are full-length research reports that contain detailed descriptions of experimental work, with clear interpretation and discussion of the theoretical and experimental results and data. Articles should be structured under the section headings Introduction, Materials and Methods, Results, Discussion, Acknowledgment, Nomenclature/Appendix (if applicable), and References. Authors should present their material with utmost clarity and conciseness and in a logical manner. Constant repetition of experimental procedures, information, and facts among sections should be avoided. The average length of a published Article should be approximately eight printed page long including tables and figures.

The organization shown below should be followed (in the order given):

Title page

- title of the paper
- author name(s)
- author affiliation(s)
- address(es) of the institution(s) at which the work was performed
- name, postal and e-mail addresses, and phone and fax numbers of the corresponding author to whom the revision or galley proofs of the paper is to be sent
- a brief running title (not to exceed 54 characters and spaces)

With regard to titles, avoid the main title: subtitle arrangement, declarative titles, complete sentence constructions, and unnecessary use of articles. Because each manuscript should present results of independent and cohesive study, numbered series titles are not allowed. The running title will be considered during compilation of the subject index and will be at the top of each printed page.

Place an asterisk after the name of the author to whom inquiries regarding the paper should be directed.

The affiliation address for each author should be indicated by superscript arabic numbers (1, 2, 3, etc).

Abstract

Articles must include an Abstract of 250 words or fewer. The

Abstract should not repeat information already present in the title. It should be suitable for direct inclusion in Current Contents, Chemical Abstracts, and Biological Abstracts, etc.

Keywords

Immediately after the abstract, provide a maximum of 6 keywords. Please avoid general terms, multiple concepts (avoid, for example, “and” “of”), and abbreviations. Only abbreviations firmly established in the field may be eligible.

Introduction

The Introduction presents the purpose of the studies reported and their relationship to earlier work in the field. It should not be an extensive review of the literature. Use only those references required to provide the most salient background to allow the readers to understand and evaluate the purpose and results of the present study without referring to previous publications on the topic.

Materials and Methods

The Materials and Methods section should be brief but include sufficient technical information to allow the experiments to be repeated by a qualified reader. Only new methods should be described in detail. Cite previously published procedures in references.

Results

The Results section should include the rationale or design of the experiments as well as the results of the experiments. Results can be presented in figures, tables, and text. Reserve extensive discussion of the results for the Discussion section.

Discussion

The Discussion section should focus on the interpretation of the results rather than a repetition of the Results section. The Results and Discussion sections may be combined into one section when substantial redundancy cannot be avoided in two separate sections or if a long discussion is not warranted.

Acknowledgments

Place Acknowledgments, including information on the source of any financial support received for the work being published, before the References.

References

The References section must include all relevant published works, and all listed references must be cited in the text. Arrange the reference list in the order of their appearance in the main text, and then number the list consecutively.

Cite listed references in the text by their list number in square brackets (e.g., [1, 4, 10]), not by author name/year. The author(s) must check the accuracy of all reference numbers, as the MBL will not be responsible for incorrect in-text reference citations.

Abbreviate journal names according to the PubMed Entrez Journals database (available at <http://www.ncbi.nlm.nih.gov/entrez/>). The referencing styles shown in the examples below should be used for books (1), specific chapters in books (2), journal articles (3), and websites (4), respectively:

1. Brock TD, Madigan MT. 1988. *Biology of Microorganisms*, pp. 42-59. 5th Ed. Prentice Hall, Englewood Cliffs, New Jersey.
2. Gershon AA, Russa P La, Steinberg SP. 1999. Varicella-zoster virus, pp. 900-911. In Murray PR, Baron EJ, Pfaller MA, Tenover FC, Tenover RH (eds.), *Manual of Clinical Microbiology*, 7th Ed. American Society of Microbiology, Washington, D.C.
3. Lee YH, Park JS. 2004. Evaluation of operational conditions and power consumption of bioattiritor for enzymatic saccharification of uncooked starch. *J. Microbiol. Biotechnol.* 14: 351-357.
4. Kirkman TW. 1996. Statistics to Use. Available from <http://www.physics.csbsju.edu/stats/>. Accessed Nov. 20, 2011.

References to papers accepted for publication but not yet published should show the journal name and, if known, the probable year of publication, and state “in press.”

The following types of references are not valid for listing in the References section:

- unpublished data
- personal communication
- manuscripts in preparation or submitted
- pamphlets
- abstracts
- patents
- newsletters
- material that has not been subjected to peer review.

References to such sources should be made parenthetically in the text (e.g., Lee YH et al. 1989. Abstr. Annu. Meet. Kor. Soc. Appl. Microbiol. Seoul, Korea, p. 159).

Figure legends

Figure legends should contain a brief description of the experiments so that the figure can be understood without reference to the body of the text. However, the legend should not repeat Materials and Methods or contain interpretive statements.

Tables

Tables should be typewritten separately from the main text and in an appropriate font size to preferably fit each table on a separate page. Each table must be numbered with Arabic numerals (e.g., Table 1, Table 2) and include a title. Place footnotes to tables below the table body and indicate them with superscript lowercase letters (a, b, c, etc), not symbols. Do not use vertical rulings in the tables. Each column in a table must have a heading, and abbreviations, when necessary, should be defined in the footnotes

Figures

Figures should be provided separately from the main text. Use Arabic numerals to number all figures (e.g., Figure 1, Figure 2) according to their sequence in the text. The figure number must appear well outside the boundaries of the image itself. Multipart figures should be numbered in uppercase and bold font letters (A, B, C, etc) without parenthesis, both on the figure itself and in the figure legends.

Note that figures may have to be reduced in size to fit the one-column (84 mm) or two-column (176 mm) space of the printed page, as determined by the journal designer. Original figures, especially line drawings, must therefore contain fonts and other detail that are large and clear enough to be legible even after a 50% reduction in size. Line drawings must be a minimum of 0.5 mm thickness for clear reproduction. The preferred symbols for graphs are ○, ●, □, ■, △, ▲, ▽, ▼. Where possible, the same symbol should be used for the same quantity in different figures. Simple bar diagrams reporting only a few values are usually unnecessary; the data can normally be given in a few lines of text. It is editorial policy not to publish bar diagrams with “three-dimensional” bars unless there is a specific justification for their use. Tints should not be used as shading for bars

All figures should be created with applications that are capable of preparing high resolution TIFF or EPS files acceptable for publication. All figures should be embedded at the end of text in a single Word or PDF file when you initially submit manuscript. If your paper is accepted, we will require submission of figures as separate TIFF or EPS files at publication quality resolution. Blurred images will not be accepted. Diagrams and photographs submitted in electronic format must be of the following minimum resolutions:

- 300 dpi for photographs or halftones only, in both black and white and color
- 600 dpi for photographs or halftones with line artwork as insets
- 600 dpi for line artwork or lettering
- 1,200 dpi for fine-line artwork and artwork with gray shades

II. Notes

Notes are short reports for the presentation of brief observation that have insufficient material to fulfill the structure of a full-length article. They are intended for reporting preliminary studies or brief

studies of a descriptive nature. Notes should be arranged in the same way as Articles, except that the Introduction, Results, and Discussion sections are in a combined section with no section headings. The abstract should not exceed 100 words. The main text should follow the logical flow of a structured article and should not exceed 1,200 words; the total number of figures and tables should not exceed four. Notes should be approximately 3-4 printed page long. The References section is identical to that of Articles. Notes are subjected to review.

III. Reviews

Authoritative and critical Reviews of the current state of knowledge regarding any aspect of microbiology and biotechnology are preferred.

Reviews should be divided into sections with appropriate headings. The format of the References section is identical to that of Articles. While there is no limitation on the length of a Review, it is recommended that a standard Review comprises no more than the equivalent of 12 printed journal pages, including display items and references. References should number no more than 80. If, for a particular reason, an author wishes to exceed or diverge from these guidelines significantly, they should contact the Production Editor (mbl@mbl.or.kr) before submitting a manuscript. Unsolicited reviews will be considered but are subject to the approval of the Editor-in-Chief and will be accepted only under special circumstances.

Reviews will be subjected to an independent peer review, and the Editor-in-Chief may request changes or decide not to proceed with publication.

NOMENCLATURES, UNITS, ABBREVIATIONS, AND SYMBOLS

Nomenclatures and abbreviations for chemical and biochemical agents, microorganisms, enzymes, proteins, and genes should follow the *Instruction to Authors* for journals published by the American Society for Microbiology (available online at <http://journals.asm.org/>).

For nomenclature of restriction enzymes, DNA methyltransferases, homing endonucleases, and their genes, refer to the article by Roberts *et al.* (*Nucleic Acid Res.* 31:1805-1812, 2003)

The MBL follows the same nomenclature for viruses as the *Journal of Virology*, and more detailed information can be found in the instruction to author of that journal (available online at <http://jvi.asm.org/>).

All abbreviations should be defined at their first use in the text only; do not repeat the definition of abbreviations thereafter.

Note that the MBL uses the following specific design styles (Nomenclature, abbreviations, units and symbols):

- The MBL prefers American spelling (e.g., labeling, sulfur, nonspecific, antiviral), abbreviations (Table 1), and nomenclature to follow internationally agreed recommendations. However, authors may use commonly used abbreviations/acronyms but these must be defined in the text at first citation and included in the Abbreviations list.
- It is often convenient, especially in figures and table headings, to give a multiple of the quantity set or measured by multiplying

it by a stated factor. The units in which it is expressed should not be multiplied by a number but may be indicated by prefixes such as: M, k, m, μ , n or p (see Table 2).

- The JMB prefers the IUBMB recommendations on symbolism and terminology in rate/equilibrium constants and enzyme kinetics. e.g., K_m , K_s , k_1 , k_{cat} , V_{max} , V_0 , E_0 , E_h , M_r , I_0 , ΔG_a (i.e., subscripted, non-italicized).
- SI (Système International d'Unites) units and quantities should be used (see Tables below) (see http://www.bipm.fr/enus/3_SI/si.html) but Å, cal, p.p.m. can be used where appropriate.
- Leave a space between a number and its unit of measure. (Exception, do not leave a space between a number and the temperature degree, percent, angular degree, angular minute, or angular second symbols, 15°C, 50%, 90°, 75', 18").
- Use a slash (/) in units of measure (i.e., g/ml rather than g ml⁻¹).
- Use a slash (/) in spelled-out units of measure, not the word "per", before the abbreviation for a unit in complex expressions. e.g., 50 μ g of peptide/ml, 25 mg of drug/kg of body weight, 10 counts/s, 12 domains/cm³, 2×10^3 ions/min, 0.8 keV/channel, and 125 conversions/mm².
- Do not add an "s" to make the plural of any abbreviated units of measure. e.g., 50 mg (not 50 mgs), 3 mol (not 3 mols).
- Do not mix abbreviations and spelled-out units within units of measure.
- Do not capitalize surnames that are used as units of measure.
- Centrifugal force should be preferably expressed as $\times g$, rather than rpm.
- L-amino acid, D-amino acid (i.e., LD in small caps).
- Names for regional bioproducts should be written in non-italicized lowercase letters. The names should be explained in a parenthesis when used first time in the abstract/text. (e.g., kimchi (Korean traditional fermented cabbages)).
- Usage should be consistent within a paper.

SEQUENCE DATA FORMATS

Diagrams of nucleotide and amino acid sequences should be prepared in the most effective layout. The layout should be designed to fit the journal page economically, i.e. to fill either the full width of the page (176 mm) or a single column (84 mm). The height of the characters should be about 1.5-2 mm (or 6-8 point). For sequence data at full-page width with this size of type, a layout with 80-100 nucleotides per line is appropriate (or 60-70 if there are spaces between the codons). A single-column layout would ideally fit 50-60 nucleotides per line. If possible, lines of nucleic acid sequence should be subdivided into blocks of 10 or 20 nucleotides by spaces within the sequences or by marks above it. There should not be too much space between the lines of sequence. Use of the single-letter amino acid code is preferred.

MICROARRAY DATA

Data from microarray gene expression studies must comply with the MIAME guidelines (see <http://www.mged.org/Workgroups/MIAME/miame.html>).