

Journal of Pharmacological Sciences (J Pharmacol Sci) is an **international journal** intended for the advancement of pharmacological sciences in the world. The *Journal* welcomes submissions in all fields of experimental and clinical pharmacology, including neuroscience, and biochemical, cellular, and molecular pharmacology of the 18 subject categories described below, for publication as **Reviews, Full Papers, or Short Communications**. All papers are subjected to **peer-review**. Manuscripts will be published within 2 – 3 months after their acceptance.

Submissions that have been published or accepted, or are under consideration for publication, with essentially the same content, will not be considered. This restriction does not apply to results published as an abstract, letters to editors, or as submissions for symposia, provided that the submission adds significantly to the information available in the previously published submission.

Conflict of Interest (COI) must be considered to prevent ambiguity about financial and personal relationships that might bias the submitted work. All authors are requested to disclose any actual or potential conflict of interest including any financial, personal, or other relationships with other people or organizations for the past one year prior to submission that could inappropriately influence, or be perceived to influence, their work. This disclosure must be included in the text of the manuscript under the Conflicts of Interest heading. If the authors have no conflicts of interest, they must state as much, for example: "The authors indicated no potential conflicts of interest." For a general description of **authorship** and the conception of COI, please refer to the "Authorship and Contributorship" and "Conflicts of Interest" sections in the "*Uniform Requirements for Manuscripts Submitted to Biomedical Journals*" (<http://www.icmje.org/index.html>).

Manuscripts that reveal a lack of proper, ethical consideration for experimental animals or human subjects will not be accepted for publication. The *Journal* endorses the "*Guiding Principles for the Care and Use of Laboratory Animals*" approved by The Japanese Pharmacological Society and the "*Recommendations from the Declaration of Helsinki*". All ethical conditions must be indicated in the manuscript; e.g., the procedures followed were in accordance with institutional guidelines; the study was approved by a relevant ethical review committee (for experiments using human subjects, a certificate of approval must be also provided at the manuscript submission); the human subjects gave their informed consent; etc.

Authors are requested to **select one or two** (in their order of priority) **of the following subject categories** to which the manuscript applies. For any study employing natural medicine materials (NMM) (the details for NMM are described later in the last paragraph of section 5. General Instructions), be sure to include category No. 18 in your selection:

1. Biogenic active substances
2. Receptors/Channels/Transport systems
3. Intracellular signaling
4. Biochemical pharmacology
5. Peripheral nervous system pharmacology
6. Cardiovascular pharmacology/Hematology
7. Central nervous system pharmacology
8. Respiratory pharmacology
9. Renal pharmacology
10. Gastrointestinal pharmacology
11. Smooth muscle pharmacology
12. Bone and dental pharmacology
13. Endocrine pharmacology

14. Clinical pharmacology
 15. Immunopharmacology/Inflammation
 16. Chemotherapy
 17. Toxicology
 18. Natural medicine materials with significant biological activities
- Authors are required to **suggest four reviewers** who would be the most pertinent to review the submitted paper. Authors may also indicate up to three reviewers that they would like excluded from the review process. The ultimate selection of such reviewers is at the sole discretion of the editor.

Preparation of Manuscripts

Papers should be in **standard English** and be prepared in A4 (210 mm × 297 mm) page size, using standard fonts with size of 11 or 12, with double-spacing, and margins of at least 25 mm all around (desirably, 25 lines per page). The authors must strictly adhere to the proper format of the *Journal* for all sections of the manuscript; refer to papers in recent issues for the general layout of the paper and also for details. For authors whose native language is not English, the *Journal* strongly recommends brushing up the English of the manuscript by consulting an English-speaking scientist before submission to avoid delays in receiving and processing of the manuscript.

1. Full Papers

1) Title page — should include the complete title of the manuscript; full names of all authors; their affiliations and addresses; a running title (short title) of no more than 40 characters (including spaces); and the name and E-mail address of the corresponding author.

2) Abstract and keywords — 200 words presented in a concise form and including the purpose, general methods, findings, and conclusions of the research described in the paper. A list of 5 keywords or short phrases suitable for indexing should be typed at the bottom of the abstract page. Avoid vague or overly general terms. If necessary, the keywords will be adjusted to the standards of the *Journal* by the editors without consulting the authors.

3) Introduction — should give a short and clear statement of the relevant background and the rationale of the study.

4) Materials and Methods — should include explicit, concise descriptions of all new methods or procedures employed. Commonly used methods require only a citation of the original source. The description should be such that the reader can judge the accuracy, reproducibility, reliability, etc. of the work.

5) Results — should include experimental data but not extended discussions of its relative significance. Results are more easily grasped by readers if they are presented in graphic or tabular form rather than discursively. Data should not be repeated in the text, Tables, and Figures.

6) Discussion — should be pertinent to the results. Speculation is to be based on data only; be concise and clear. Lengthy discussions will necessarily mean a delay in accepting manuscripts for publication. The text should be written with a logical connection between the introduction and conclusions.

7) References — The format should be as described in 5. General Instructions.

2. Short Communications are completed projects of smaller scope, but may not be used for preliminary publications of the data; therefore, the same material cannot be published elsewhere as an original paper. The main body of the text of these communications should be no more than 1,500 words in length, without any subheadings, and

manuscripts should contain no more than 3 Figures and/or Tables and a maximum of 15 references. They should have an abstract not exceeding 100 words in length. The manuscripts normally occupy 4 journal pages (e.g., about 12 typewritten pages including all components). Provide a running title (short title) of no more than 40 characters (including spaces) in length and 3 keywords or short phrases for indexing (see [1. Full Papers](#)). Indicate the number of words used in the main body of the text. Please refer to [5. General Instructions](#) for references and other manuscript requirements.

3. Reviews will usually be written at the request of the *Journal*. Occasionally, unsolicited ones will be considered for publication; authors/organizers of such reviews should consult one of the editors, enclosing a one-page typed synopsis, before submitting the article. The unsolicited articles are subjected to rigorous assessment of their suitability for publication.

Five types of reviews will be considered:

1) Current Perspectives (up to 10 typewritten pages for the main body of the text and a maximum of 30 references; they will normally occupy 6 journal pages): These articles should provide insight into or comments on current directions of research on a topic and/or discuss potential new approaches to an area of investigation.

2) Critical Reviews (up to 40 typewritten pages for the main body of the text and a maximum of 100 references): These should cover a current topic of interest that has not been recently reviewed, emphasizing a critical discussion of noteworthy developments in the field; they should not be just a compendium of studies on the topic and should not be only autobiographical.

3) Survey Reviews (up to 60 typewritten pages for the main body of the text and a maximum of 300 references): Should be a comprehensive survey of the research on a topic that has not been recently reviewed.

4) Forum Minireviews (approx. 30 journal pages): One set of reviews is put together by an organizer(s) on a particular topic; each set is composed of a maximum of 6 minireview articles (about 15 typewritten pages for all components of each manuscript, as a standard length; 4–5 journal pages, each) and a preface. The topic and contributors should be based on one of the Symposia of the Annual Meeting of The Japanese Pharmacological Society or they may be occasionally based on Symposia of special interest to pharmacologists.

5) New Drugs and Recent Techniques (up to 60 typewritten pages for the main body of the text and a maximum of 300 references): The purpose of these reviews is to introduce worldwide recently developed drugs and new techniques. These articles should be written in sufficient scientific detail and format to explain the characteristics of the drugs and/or promising techniques evaluating pharmacological actions.

Each manuscript should include an abstract, not exceeding 200 words, a running title (short title) of no more than 40 characters (including spaces) in length, and 5 keywords or short phrases for indexing (see [1. Full Papers](#)). Please refer to [5. General Instructions](#) for further details.

4. Correspondence (Letters to the Editor): The *Journal* will occasionally consider publishing letters to the editor from readers and authors in the “Correspondence” section. Letters should be comments and clarifications on articles that have recently been published in this *Journal* and be in a concise form. When necessary, please refer to [5. General Instructions](#).

5. General Instructions

References — should be cited in the text by number, in parentheses, in line with the text; the full reference is cited in a numbered list at the end of the paper. The reference list should be prepared with the authors’ names (list all authors if six or less; otherwise, list the first six followed

by et al.), full title of paper, journal, year of publication, volume, and initial and final pages.

e.g., Mizuno M, Iwakura Y, Shibuya M, Zheng Y, Eda T, Kato T, et al. Antipsychotic potential of quinazoline ErbB1 inhibitors in a schizophrenia model established with neonatal hippocampal lesioning. *J Pharmacol Sci.* 2010;114:320–331.

References to books should include the authors’ names, title of article, editors, title of book, edition, city where the publisher is located, publisher, year of publication, and initial and final pages of the cited article or section.

e.g., Zhao Q, Holmes GL. Repetitive seizures in the immature brain. In: Pitkänen A, Schwartzkroin PA, Moshé SL, editors. *Models of seizures and epilepsy*. 2nd ed. San Diego: Academic Press; 2006. p. 341–350.

For formats of other published materials, please refer to the Vancouver style (see the “References” part of the “Manuscript Preparation” section in the “*Uniform Requirements for Manuscripts Submitted to Biomedical Journals*” (<http://www.icmje.org/index.html>)).

Papers are not to be cited as “in press” unless they have already been accepted for publication. In such cases, state the name of the journal and provide the accepted manuscript.

Figures and Tables — should be numbered consecutively with Arabic numerals, with each one displayed on a separate page. These usually will be reduced to fit a single column, 8.3-cm-wide, or at most, a double column, maximally 17.6-cm-wide. Please refer to a current issue of this *Journal* for general patterns. Any **color Figure** submitted by the authors will be processed with the understanding that upon acceptance of the manuscript, the Figure must be published in color both in the print and online versions with the cost of the reproduction being charged to the authors. In accord with this regulation, authors cannot change the publication condition of the Figure (i.e., from “color” to “monochrome” or vice-versa) after the manuscript is accepted for publication. If they are unable to pay or refuse to pay the color charge, the acceptance of the manuscript will be rescinded; that is, the manuscript will not be published.

Abbreviations and Units — While authors should avoid unfamiliar abbreviations, a limited number of clearly defined abbreviations may be used. Such abbreviations must be defined at the first mention in the text or defined in alphabetical order in a footnote on the first page. When in doubt, avoid unfamiliar abbreviations. For units, the *Journal* recommends the use of the International System of Units (SI Units). It is desirable to refer to standard abbreviations and units listed in the Instructions to Authors of the *Journal of Biological Chemistry* (<http://www.jbc.org/misc/ifora.xhtml>).

Drugs — Generic names should be used in the text, Figures, and Tables.

Electronic Supplementary Materials — Although manuscripts must be complete and self-explanatory without supplementary information, materials that cannot be presented in the printed version for reasons of space or format restrictions may be published online as supplementary materials. Background information regarding experimental procedures may also be included. These additional or secondary materials are subject to the same peer-review process as the rest of the manuscript and must be cited in the main text. File sizes must be as small as possible so that they can be downloaded quickly. Acceptable formats for movie and sound are: mpg, mov, avi, mp3, and wav.

Guidelines for manuscripts concerning natural medicines — Here, “natural medicines” mean any extract(s) or unpurified constituent(s) obtained from natural sources (natural medicine materials: NMM). Studies discussing NMM should comply with the [Guidelines/Checklist](#) of the *Journal* shown later; authors **MUST** provide the **completed checklist for NMM** upon manuscript submission. Manuscripts concerning simple screening of biological activities of

the NMM and/or studies that do not meet the NMM guidelines stipulated in the Checklist for the NMM are **likely to be rejected without review**.

Consult the "**Author's Checklist for Manuscript Submission**" that appears on the final page of these instructions for a more detailed explanation of the requirements on the manuscript preparation.

Submission of Manuscripts

Manuscripts should be submitted via the online manuscript submission review, and tracking system "**Editorial Manager**" at <http://jphs.edmgr.com/>. We will not accept any manuscripts submitted as an E-mail attachment or by post. Before entering the submission web site, please refer to this "Notice to Contributors" including "Author's Checklist for Manuscript Submission" for overall guidelines for how your manuscript should be structured and formatted. Then, be sure to refer to the "**Tutorial for Authors**" available at the submission web site, which will provide you with more detailed, technical, and other important information.

Brief guidelines for electronic submission procedures (Effective from July, 2012)

- 1) Prepare the text (title page, abstract, main text, references, legends for Figures, and Tables) by MS-Word; be sure to insert page numbers. Tables can be prepared with a separate file.
- 2) Prepare the Figures using applications that are capable of generating high-resolution files. The Figure number must be indicated on each Figure itself, outside the image area.
*Compatible data files (such as Figure, Table, text) for Electronic Supplementary Materials must be prepared in the same manner.
- 3) Login as an author to Editorial Manager. You are required to have your login ID. If you do not have one, you can easily get an ID by registering your name and E-mail address.
- 4) Click "Submit New Manuscript" and enter required information [article type, title and short (running) title, authors, abstract, keywords, classification (1 or 2 subject category(s)), additional information (COI, statement of originality, confirmations of the author's checklists / NMM checklist / color Fig(s)), four suggested reviewers, etc.]] into the web pages.
- 5) On the "Attach File" page, upload the files by selecting the appropriate entry item such as i) Manuscript, ii) Table(s), iii) Figure(s), iv) Movie(s), v) Others (for review), vi) Others (not for review). Items i, ii, and iii will be built into a single PDF; items iv and v will be accessed via PDF with links; item vi will not be included in PDF, but will be accessible to the Editorial Office and Editor only as a companion file. Item v may include the COI statement; a certificate of approval issued by the ethical

committee for experiments using human subjects; an "In Press" article to be referred to; or appended data/information necessary for the manuscript such as papers discussing natural medicine materials (NMM); supplementary materials other than those falling under categories ii – iv.

- 6) After uploading the files, you will be requested to approve the formatted PDF. Return to the main menu and APPROVE your submission accordingly.

The editors reserve the right to make minor revisions in manuscripts accepted for publication in the interest of clarity, consistency, and readability. However, they cannot accept responsibility for opinions expressed by contributors.

The copyright of the articles published in the *Journal* is transferred from the authors to the Publisher, The Japanese Pharmacological Society, upon acceptance of the manuscript.

Charges (the indicated price does not include the domestic consumption tax)

- A page charge of ¥4,000 [four thousand Japanese Yen (JPY)] per printed page will be made for all manuscripts, except for the Reviews on "New Drugs and Recent Techniques" (¥12,000 per printed page).
- Cost of color reproduction is ¥60,000 per printed page consisting of one or more color Figures.
- Handling charge for electronic supplementary materials is ¥1,800 per page (for copyedited compatible items: PDF) or per one file (for non-copyedited items: movie, sound, etc.).
- All reprints are supplied at cost.
- Charges for English revision may be made if extensive rewriting is necessary.

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Journal of Pharmacological Sciences

Author's Checklist for Manuscript Submission

(Effective from May 2013)

Please consult the "Notice to Contributors" and complete the following checklist so that your manuscript will conform to the style and usage of the *Journal of Pharmacological Sciences* before submission.

[] Title page

- title: avoid using the trade name of a drug / should not contain abbreviations except for very standard ones / should indicate the experimental animal / a drug for which a generic name has not yet been given can be designated by a combination of letters and numbers only when accompanied by a specification of its pharmacological property (e.g., anti-allergic drug, AB-123)
- provide full names of all authors / provide affiliations and addresses of all authors / identify each author with the appropriate address by numerical superscripts
- provide information about the corresponding author
- provide a running title of no more than 40 characters and spaces
- indicate the number of words used in the main body of the text (Short Communication only)
- provide any necessary footnotes (e.g., change of address)

[] Abstract page

- limit Abstract to 200 words for Full Paper and Review, 100 words for Short Communication
- do not cite references in Abstract by reference numbers, but use full citation; omit the article title
- provide keywords: 5 items for Full Paper and Review, 3 items for Short Communication / avoid vague or overly general terms

[] Text

- main- and subheadings: refer to current style in this *Journal*
- drug names: use generic names; if a generic name has not yet been given, provide the full chemical name at the first mention
- ionic charge should be shown throughout (e.g., Ca²⁺ channel)
- provide names of sources including city, state (USA), and country (except for Japan) for experimental apparatuses, reagents, animals, and cell strains
- all ethical conditions for experimental procedures should be clearly described in the Materials and Methods section
- unpublished data, personal communication, etc. in the text: specify the source of the information (e.g., Y. Yamada et al., unpublished data)
- disclose, if any, authors' financial interest in the subject matter or relationship with other people and organizations with such financial interest in the Conflicts of Interest section

[] References –refer to current issues–

- list references in numerical order according to the first mention in the text
- "in press" citation must have been accepted for publication; designate journal title
- "unpublished observations", "personal communication", "submitted manuscript": do not list in "References", but insert in appropriate places in the text with source name
- "encyclopedia", "patent", and "thesis" are not valid reference citations
- state "(text in [specify language used] with English abstract)" for a paper with text written in languages other than English but with English abstract

- avoid citing any paper written in a language not normally used for international scientific publications (including Japanese) and does not have an English abstract; if you must cite such a reference, state your justification for including this reference, on a separate sheet; and specify the language in the reference list

[] Figures and their legends –refer to current issues–

- supply Figs. of sufficient quality for direct printing
- all Figure elements (letters, numbers, and symbols, etc.) should be sufficiently large and clear so that they can be easily read after reduction
- in Fig. legends, do not use the pictorial representation of the actual graphic symbols themselves or actual patterns, but describe them in words (e.g., closed circle, dotted column) or commonly usable marks (e.g., *, #); alternatively, give the explanations of symbols/patterns on the Figs., if representing them pictorially
- magnification of electronmicrographs should be indicated by a calibration bar on the photographs themselves to ensure that, after any necessary reduction, the scale is reduced in the correct proportion
- symbols indicating statistical significance: the number of symbols used to indicate a particular probability (*P* value) should be consistent throughout the manuscript; the same probability should be represented by the same number of symbols in the Figs. and Tables, and the number of symbols should increase as the *P* value decreases
- avoid unnecessary three-dimensional representation of data in bar graphs
- type legends for Figs. double-spaced on a separate page
- for a Fig. consisting of separate panels: do not provide a separate title for each panel, but rather provide one comprehensive title; explanations of panels to be provided in the legend following the title
- any Fig. submitted in color will be printed "in color" / all color reproduction costs must be at the author's expense

[] Tables and their footnotes –refer to current issues–

- type each Table double-spaced on a separate page; do not insert in the running text
- type a brief informative title above the Table and footnotes at the foot of the Table
- do not use vertical lines

.....

[] Short Communication

- to determine if your study is appropriate for publication as a Short Communication, carefully read the Notice to Contributors
- type text without subdivision into sections
- Abstract of 100 words or less
- main body of the text of 1,500 words or less (on the title page, indicate the number of words used)
- no more than 15 references
- no more than 3 Figs. and/or Tables
- other manuscript requirements: see items shown above (from **Title page** to **Tables** sections)

Guidelines/Checklist for authors submitting papers discussing Natural Medicine Materials (NMM) to the *Journal of Pharmacological Sciences*

(Effective from January 2008)

Experimental procedures and manuscript preparation must comply with the proceeding requirements. Please **upload the completed checklist and required supplemental data/information on the ‘‘Attach File’’ page of the web submission system.**

Check each bracket upon completion

1. Description of the NMM being studied [] Provide Latin names, nomenclature author, and family name (in parentheses) for all collected materials used in the current study.
2. Source of the NMM used in the study [] In the case that the NMM used in the current study is collected in the field or acquired at a local market(s), the collection site(s) and the name(s) and affiliation of the person(s) identifying the material(s) should be indicated in the manuscript. ----- [] If the NMM/NMM extract(s) used in the study is purchased from an industrial source(s), the name of the manufacturer(s) and lot number of the material(s)/extract(s) should be indicated.
3. Specimen number and depositing of the NMM [] Indicate the specimen number(s) of the NMM being studied and the name of the affiliation/organization where these specimens are deposited. ----- [] The specimen(s) used in the study should be stored for 10 years in the affiliation/organization to permit future reference and verification. <i>This information will allow the NMM to be used by other researchers should requests be made.</i>
4. Extraction methodology and chemical profiling of the NMM 1) [] The detailed method of extraction (i.e., solvent, temperature, and time) and the yield of extracts should be clearly indicated in the manuscript. ----- [] Chemical profiles of the NMM extract must be provided; this is usually done by means of an HPLC fingerprint or quantitative analysis of known components. When the bioactive constituents in the extracts are unknown, a qualitative analysis with HPLC or TLC may be acceptable. ----- [] Chemical characterization of the NMM extract(s) should be conducted by using marker substances that are characteristic to the NMM used in the study, but not ubiquitously distributed in nature. ----- 2) [] In the case that the extraction methodology and chemical profiling of the NMM extracts used in the study have previously been reported by the authors in a peer review journal(s), detailed information can be substituted by providing a brief explanation along with authors' references. <i>A chemical profile of the NMM extract and detailed explanations about it should be clearly indicated in the manuscript or should be provided to the editor along with the manuscript. That being said, this information needs to be reviewed for publication in the Journal.</i>
5. Elucidation of pharmacological activities of the NMM being studied [] To evaluate pharmacological efficacy of the NMM extract(s), a standard drug(s) should be simultaneously evaluated as a reference (positive control). ----- [] The in vitro activity of an extract should be detected at concentrations lower than 100 microgram/ml. <i>Use of reference medications will facilitate comparison of the efficacy of the NMM to established standard drugs. With such data, the readers can better appreciate the efficacy and underlying mechanism of the NMM under study.</i>

I declare that our manuscript submitted to the *Journal of Pharmacological Sciences* has been prepared according to the guidelines described above.

Signed () Date ()