



hary_widjajanti unsri <hary_widjajanti@unsri.ac.id>

[STI] Article Review Request

1 pesan

Prof. Aldes Lesbani <scitechindones@gmail.com>
Kepada: Hary Widjajanti <hary_widjajanti@unsri.ac.id>

19 Februari 2023 pukul 00.41

Hary Widjajanti:

I believe that you would serve as an excellent reviewer of the manuscript, "Synthesis, characterization and antibacterial activity of some mesalazine derivatives," which has been submitted to Science and Technology Indonesia. The submission's abstract is inserted below, and I hope that you will consider undertaking this important task for us.

Please log into the journal web site by 2023-02-26 to indicate whether you will undertake the review or not, as well as to access the submission and to record your review and recommendation.

The review itself is due 2023-03-19.

Submission URL: <https://scietechindonesia.com/index.php/jsti/reviewer/submission?submissionId=709&reviewId=772&key=3BCmmk>

Thank you for considering this request.

Prof. Aldes Lesbani
admin@scietechindonesia.com

"Synthesis, characterization and antibacterial activity of some mesalazine derivatives"

Mesalazine, also known as mesalamine or 5-aminosalicylic acid (5-ASA), it and its derivatives are among the oldest drugs approved for the treatment of inflammations of the digestive tract such as ulcerative colitis and mild to moderate Crohn's disease. The first mesalazine derivative was sulfasalazine which discover and therapeutic used in 1938. Four copies of mesalazine derivatives (two Schiff-bases and two azo compounds) were synthesized in high yields. Schiff bases were synthesized by reaction of mesalazine with pyrrole-2-carbaldehyde or indole-2-carbaldehyde to give 5-(((1H-pyrrol-2-yl)methylene)amino)-2-hydroxybenzoic acid (1) or 5-(((1H-indol-2-yl)methylene)amino)-2-hydroxybenzoic acid (2), respectively. Whereas the azo compounds were synthesized by coupling mesalazine with sulfamethoxazole (3) or pyridoxine to give 5-amino-2-hydroxy-3-((4-(N-(5-methylisoxazol-3-yl)sulfamoyl)phenyl)diazanyl)benzoic acid or 2-hydroxy-5-((5-hydroxy-3,4-bis(hydroxymethyl)-6-methylpyridin-2-yl)diazanyl)benzoic acid (4), respectively. The synthesized compounds were identified by IR and ¹H-NMR spectroscopy. Antibacterial evaluation of the synthesized compounds was screened in vitro against gram negative bacteria (*Escherichia coli* and *Pseudomonas aeruginosa*) and gram positive bacteria (*Staphylococcus aureus*). The activity studies showed that the Schiff-base compounds have higher activity than azo compounds against *Escherichia coli* and *Staphylococcus aureus*. The highest activity was compound 1 which gave 23 mm of inhibition zone against *Escherichia coli* bacteria using 1000 µg/ml. On the other hand, compound 2 gave 25 mm against *Staphylococcus aureus* bacteria using the same highest concentration.

Science and Technology Indonesia

A Peer-Reviewed Research Journal of Science and Technology

p-ISSN: 2580-4405 | e-ISSN: 2580-4391

E-mail: admin@sciencetechindonesia.com | sciencetechindonesia@gmail.com

Homepage: <http://sciencetechindonesia.com/index.php/jsti>

[← Back to Submissions](#)

Review: Synthesis, Characterization, and Antibacterial Activity of Some Mesalazine Derivatives

1. Request
2. Guidelines
3. Download & Review
4. Completion

Request for Review

You have been selected as a potential reviewer of the following submission. Below is an overview of the submission, as well as the timeline for this review. We hope that you are able to participate.

Article Title

Synthesis, Characterization, and Antibacterial Activity of Some Mesalazine Derivatives

Abstract

Mesalazine, often referred to as mesalamine or 5-aminosalicylic acid (5-ASA), and its derivatives are some of the first medications to be approved for treating digestive tract inflammations, including ulcerative colitis and mild to moderate Crohn's disease. Sulfasalazine, discovered in 1938 for therapeutic use, was the first mesalazine derivative. High yields of four different mesalazine derivatives were synthesized, including two Schiff bases and two azo compounds. The present study involved the synthesis of Schiff bases through the reaction of mesalazine with pyrrole-2-carbaldehyde or indole-2-carbaldehyde, resulting in the formation of 5-(((1H-pyrrol-2-yl)methylene)amino)-2-hydroxybenzoic acid (1) or 5-(((1H-indol-2-yl)methylene)amino)-2-hydroxybenzoic acid (2), respectively. The synthesis of azo compounds involved the coupling of mesalazine with sulfamethoxazole or pyridoxine, resulting in the formation of 5-amino-2-hydroxy-3-((4-(N-(5-methylisoxazol-3-yl)sulfamoyl)phenyl)diazenyl)benzoic acid (3) or 2-hydroxy-5-((5-hydroxy-3,4-bis(hydroxymethyl)-6-methylpyridin-2-yl)diazenyl)benzoic acid (4), respectively. The identification of the synthesized compounds was carried out using IR and ¹H-

NMR spectroscopy. Antibacterial assessment of the synthetic compounds was performed in vitro against gram-negative bacteria (such as *Escherichia coli* and *Pseudomonas aeruginosa*) and gram-positive bacteria (*Staphylococcus aureus*). The antibacterial activity studies demonstrated that against *Escherichia coli* and *Staphylococcus aureus*, the Schiff base compounds are more active than azo compounds. Compound 1 showed the highest activity, resulting in a 23 mm inhibition zone against *E. coli* at 1000 ug/ml. In contrast, the antibacterial activity of compound 2 was observed to be 25 mm against *S. aureus* at the same highest concentration.

Review Type

Anonymous Reviewer/Anonymous Author

[View All Submission Details](#)

Review Schedule

2023-02-18

Editor's Request

2023-02-26

Response Due Date

2023-03-19

Review Due Date

[About Due Dates](#)

Save and continue



← Back to Submissions

Review: Synthesis, Characterization, and Antibacterial Activity of Some Mesalazine Derivatives

- 1. Request** **2. Guidelines** **3. Download & Review** **4. Completion**

Reviewer Guidelines

1. The responsibility of the reviewers

If you accept to be the reviewer, you must treat the document as confidential documents. You are not allowed to share them with anyone without prior authorization for the journal editor and due to the peer review is confidential, you also not allowed to share information about the review with anyone without permission from both editor and author.

2. The review report

The report of your review will help the journal editor decide whether or not the article to be published in our journal. Please give all of your opinions and general observation of the reviewed article. Please make sure that your comment is courteous and constructive to the article content and do not include any personal remarks or your personal details, i.e. name, address, etc.

During the commenting the article, you should explain and support your judgment in order to make the editor and author easily understand the reasoning behind your comments.

3. Checklist

Summarize the article in a short paragraph. This shows the editor you have read and understood the research.

Give your main impressions of the article, including whether it is novel and interesting, whether it has a sufficient impact and adds to the knowledge base.

Point out any journal-specific points – does it adhere to the journal's standards?

If you suspect plagiarism, fraud or have other ethical concerns, raise your suspicions with the editor, providing as much detail as possible.

Give specific comments and suggestions, including about layout and format, Title, Abstract, Introduction, Graphical Abstracts and/or Highlights, Method, statistical errors, Results, Conclusion/Discussion, language, and References.

4. Your recommendation

When you make a recommendation, it is worth considering the categories the editor most likely uses for classifying the article:

Reject (explain reason in report)

Accept without revision

Revise – either major or minor (explain the revision that is required, and indicate to the editor whether or not you would be happy to review the revised article)


[Continue to Step #3](#)

[Go Back](#)

[← Back to Submissions](#)

Review: Synthesis, Characterization, and Antibacterial Activity of Some Mesalazine Derivatives

1. Request **2. Guidelines** 3. Download & Review **4. Completion**

Review Files		Q Search	
 4046	Double blind-STI 709.docx	February 18, 2023	Manuscript

Reviewer Guidelines

[Review Guidelines](#)

EVALUATION FORM SCIENCE & TECHNOLOGY INDONESIA

Please give your appreciation of the scientific interest and novelty of results described below.

The originality of the work? *

- Excellent
- Good
- Fair

Poor

Scientific merit/importance to the field? *

Excellent

Good

Fair

Poor

Does the title properly and clearly describe the paper? *

Excellent

Good

Fair

Poor

Are all required components included in the abstract? Are the keywords appropriately chosen? *

Excellent

Good

Fair

Poor

Are the material and methods (Experimental section) described clearly? No ambiguity? *

Excellent

Good

- Fair
 Poor

Is the mathematical formalism logical and clearly presented? (For theoretical work only)

- Excellent
 Good
 Fair
 Poor

Description of the experimental design? *

- Excellent
 Good
 Fair
 Poor

The result presented in systematic and appropriate form? *

- Excellent
 Good
 Fair
 Poor

Statistical treatment data? (If necessary)

- Excellent
- Good
- Fair
- Poor

Relevance of discussion *

- Excellent
- Good
- Fair
- Poor

Soundness of interpretation and conclusion? *

- Excellent
- Good
- Fair
- Poor

Appropriate literature citations? Are key reference given? *

- Excellent
- Good
- Fair
- Poor

Quality of figures *

- Excellent
- Good
- Fair
- Poor

Clarity and style of tables *

- Excellent
- Good
- Fair
- Poor

Article length *

- Excellent
- Good
- Fair
- Poor

Overall quality of the paper *

- Excellent
- Good
- Fair
- Poor

Does the article contain original and self-consistent ideas? *

- Excellent
- Good
- Fair
- Poor

Is the English satisfactory? *

- Excellent
- Good
- Fair
- Poor

Referee's recommendation: *

- Acceptable in present form
- Acceptable with grammatical revision
- Acceptable with minor technical revision
- Acceptable with major technical revision
- Submit to further refereeing
- Reject article

Detailed comment (if any, in Indonesian or English)


Please follow the STI journal template.
The other correction and suggestion listed in the manuscript.

Upload

Upload files you would like the editor and/or author to consult, including revised versions of the original review file(s).

Reviewer Files

Q Search

 4183	REVIEWED_sti-review-assignment-709-manuscript-4046.docx	March 19, 2023
--	---	----------------------

Review Discussions

Add discussion

Name	From	Last Reply	Replies	Closed
<i>No Items</i>				

Recommendation

Select a recommendation and submit the review to complete the process. You must enter a review or upload a file before selecting a recommendation.

Revisions Required 

[Submit Review](#)[Save for Later](#)[Go Back](#)

 * Denotes required field

[← Back to Submissions](#)

Review: Synthesis, Characterization, and Antibacterial Activity of Some Mesalazine Derivatives

- [1. Request](#)
- [2. Guidelines](#)
- [3. Download & Review](#)
- [4. Completion](#)

Review Submitted

Thank you for completing the review of this submission. Your review has been submitted successfully. We appreciate your contribution to the quality of the work that we publish; the editor may contact you again for more information if needed.

Review Discussions					Add discussion
Name	From	Last Reply	Replies	Closed	
<i>No Items</i>					



hary_widjajanti unsri <hary_widjajanti@unsri.ac.id>

Thank Reviewer

2 pesan

Aldes Lesbani <sciencetechindonesia@gmail.com>
Kepada: hary_widjajanti unsri <hary_widjajanti@unsri.ac.id>

22 Maret 2023 pukul 16.25

Dear Dr. Hary Widjajanti, M.Si:

Thank you for completing the review of the submission, "Synthesis, characterization and antibacterial activity of some mesalazine derivatives," for Science and Technology Indonesia. We appreciate your contribution to the quality of the work that we publish.

Sincerely Yours,

Editor-in-Chief

Prof. Aldes Lesbani, Ph.D.

Science & Technology Indonesia

<http://sciencetechindonesia.com>

 **Certificate (Dr. Hary Widjajanti, M.Si.).pdf**
218K

hary_widjajanti unsri <hary_widjajanti@unsri.ac.id>
Kepada: Aldes Lesbani <sciencetechindonesia@gmail.com>

22 Maret 2023 pukul 17.41

Dear Editor in Chief Prof. Aldes Lesbani, Ph. D

I have received the sertificate. Thank you very much for your appreciation to me.

Best regards

Hary Widjajanti

[Kutipan teks disembunyikan]

CERTIFICATE OF RECOGNITION

p-ISSN: 2580-4405 e-ISSN:2580-4391

Indexed by SCOPUS, DOAJ, Crossref, Sinta, and Portal Garuda

THIS CERTIFICATE IS AWARDED TO

Dr. Hary Widjajanti, M.Si.

Article 709: Synthesis, Characterization and Antibacterial Activity of Some Mesalazine Derivatives

In recognition for your valuable contribution as a reviewer in the peer reviewer process to maintain the quality and high academic standards of the journal

Indonesia, Palembang, 22 March 2023



Prof. Aldes Lesbani, Ph.D
Editor in Chief