

ESPS Peer-review Report

Name of Journal: World Journal of Biological Chemistry

ESPS Manuscript NO: 8973

Title: The ceruloplasmin-ferroportin system of iron traffic in vertebrates

Reviewer code: 02446638

Science editor: Cui, Xue-Mei

Date sent for review: 2013-12-08 17:03

Date reviewed: 2013-12-11 02:27

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

In this manuscript, the authors have described and discussed the ceruloplasmin-ferroportin system of iron traffic in vertebrates. Indeed, the ceruloplasmin-ferroportin system constitute a unique ensemble able to export iron outside cells. The authors have adequately discussed the most recent findings regarding the structural and functional features of ceruloplasmin and ferroportin and their relationships as well. The review is reasonably well written and presented and the subject matter is of sufficient interest to the readership of World Journal of Biological Chemistry. However, the following suggestions need to be incorporated by the authors: 1. The manuscript is written as a running text without any sections. The authors should use multiple headings and sections to improve the readability of this paper. 2. Please provide a table to summarize the most important papers.

ESPS Peer-review Report

Name of Journal: World Journal of Biological Chemistry

ESPS Manuscript NO: 8973

Title: The ceruloplasmin-ferroportin system of iron traffic in vertebrates

Reviewer code: 02446642

Science editor: Cui, Xue-Mei

Date sent for review: 2013-12-08 17:03

Date reviewed: 2013-12-27 14:24

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
[Y] Grade A (Excellent)	[Y] Grade A: Priority Publishing	Google Search:	[Y] Accept
[] Grade B (Very good)	[] Grade B: minor language polishing	[] Existed	[] High priority for publication
[] Grade C (Good)	[] Grade C: a great deal of language polishing	[] No records	[] Rejection
[] Grade D (Fair)	[] Grade D: rejected	[] Existed	[] Minor revision
[] Grade E (Poor)		[] No records	[] Major revision

COMMENTS TO AUTHORS

This is an excellent review covering the ceruloplasmin-ferroportin system of iron traffic in vertebrates by a leader in this field. Iron absorption, transport and metabolism is biologically important process, and dysregulation of iron metabolism is associated with various types of diseases in human. Thus, this review will be of high importance for the readers of WJBC from diverse backgrounds. The review is very well organized into four sections, which makes it easy to read and understand, even for readers that are not familiar with this specific topic. The first section - Ferroportin, structure and function - provides a detailed overview of structure and function of this important protein. The authors did an excellent job of explaining in details different models of Ferroportin function. A particular strength of the review is the presentation of a preliminary structural model of Ferroportin based on novel data from the authors. The second section describes the structure and function of Ceruloplasmin - a member of the multicopper oxidases. The role of Ceruoplasmin in iron metabolism is well-described. The third section provides an overview of the functional integration of the two receptors that form the Ceruloplasmin-Ferroportin connection. The review of the posttranscriptional regulation of Ferroportin is excellent. The last section provides an overview of the clinical relevance of the Ceruloplasmin-Ferroportin system and pathology - with the clinical significance of specific mutations of Ceruloplasmin and Ferroportin. This section provides an important translational component to the review, and increases the overall significance of the manuscript. In summary, this is an outstanding review by an expert in the field. The detailed, but functional approach, along with a translational component will make this review highly useful for readers including both basic scientists and clinicians who are interested in biochemical mechanisms of metabolic diseases.