

ESPS Peer-review Report

Name of Journal: World Journal of Biological Chemistry

ESPS Manuscript NO: 7249

Title: The regulation and function of signal transducer and activator of transcription 3

Reviewer code: 00227684

Science editor: Zhai, Huan-Huan

Date sent for review: 2013-11-10 18:46

Date reviewed: 2013-11-17 18:05

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input checked="" type="checkbox"/> Grade A (Excellent)	<input checked="" 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	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

1. Review manuscript need to discuss about STAT3 inhibitors in theraputic aspect to cancer treatment.
2. Authors need to add a figure summarizing regulation and function of STAT3 to better understand and highlight the review manuscript.

ESPS Peer-review Report

Name of Journal: World Journal of Biological Chemistry

ESPS Manuscript NO: 7249

Title: The regulation and function of signal transducer and activator of transcription 3

Reviewer code: 00227653

Science editor: Zhai, Huan-Huan

Date sent for review: 2013-11-10 18:46

Date reviewed: 2013-11-23 17:20

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

This manuscript summarizes the regulation of STAT3 expression at the level of transcription, post-transcription and post-translational modification. In addition, functional regulation of STAT3 via nucleo-cytoplasmic shuttling, and STAT3 function in physiological and tumorigenic processes are described. The manuscript is well-written. However, I would like to comment minor points as below

Minor points

- Page 5, line 106: It would be better that the subtitle "Post-transcription regulation of STAT3 expression through alternative splicing" is changed to main title "POST-TRANSCRIPTIONAL REGULATION OF STAT3 EXPRESSION". Because main headline "TRANSCRIPTIONAL REGULATION ON STAT3" (Page 4, line 74) is not matched to "Post-transcription regulation of STAT3 expression through alternative splicing"
- Subtitle "STAT3 in stem cells" (page 11, line 271), subtitle "STAT3 in proliferation and apoptosis" (page 12, line 298), subtitle "STAT3 in tumorigenesis and cancer inflammation" (page 13, line 331) could be grouped under main title, such as "FUNCTION OF STAT3 IN PATHOPHYSIOLOGY AND DEVELOPMENT".
- Page 13, line 331: The word "cancer inflammation" needs to be corrected (for example, cancer-related inflammation).
- Page 4, line 74: "OF STAT3" is better instead of "ON STAT3".
- Page 4, line 84: space between STAT3 and executes.
- Page 4, line 98: SCOS mis-spelling.
- Page 5, line 104: It would be better to change the description "SOCS3 have a negative regulation on STAT3 expression" to "STAT3 expression is negatively regulated by SOCS3"
- Page 5, line 112: Space between of and STAT3?
- Page 5, line 118: Space between that and STAT3?
- Page 6, line 129: remove space between epithelium- and derived.
- Page 6, line 137: Space between phosphorylates and STAT3.
- Page 6, line 140: Spaces between Dimerized, STAT3 and translocates.
- Page 6, lines 142 and 143: Src instead of Scr.
- Page 6, lines 149-150: It would be better to change the sentence as follow. "Recently, several articles reported that

un-phosphorylated STAT3 can interact with nuclear factor- κ B (NF- κ B)". 15. Page 6, line 155: "post-translational" instead of "posttranslational", which is consistent with Page 6, line 134. 16. Page 7, line 64: delete "as"--- CD44, a transmembrane glycoprotein, 17. Page 7, line 166: Space between cyclin and D1. 18. Page 7, line 170: remove space between Ac-STAT3/ and DNMT1 19. Page 7, line 172: STAT3 acetylation instead of Ac-STAT3. 20. Page 7, line 181: It is better to change the sentence as follow. "STAT1 and STAT3 are also subjected to SUMOylation-----". 21. Page 7, line 183: Space between STAT3 and SUMOylation. 22. Page 8, line 186: STAT3 LOCALIZATION instead of STAT3 LOCATION 23. Page 8, line 193: NLS- and NES-containing proteins instead of NLS and NES proteins. 24. Page 8, line 201: delete "way" 25. Page 8, line 210: Space between unphosphorylated and STAT3 26. Page 9, line 212: Space between U-STAT3 and can 27. Page 9, line 216: delete (2f-FCS), because 2f-FCS is not mentioned further in the manuscript. 28. Page 9, line 218: delete (STAT3-NT), because STAT3-NT is not mentioned further in the manuscript. 29. Page 9, line 226: phosphorylated STAT3 instead of STAT3 mono-phosphorylation 30. Page 9, line 227: localized to the mitochondria of hepatocytes 31. Page 10, line 258: HIF-1 α -dependent and HIF-1 α -independent. 32. Page 11, line 261-262: The meaning of "or DNA binding domain" is not clear. 33. Page 12, line 304: STAT3 knockout mice exhibit complete embryonic lethality. 34. Page 13, line 350: activates a lot of inflammatory-related genes 35. Page 15, lines 380-382: It is better to modify this sentence. 36. Page 15, line 386: Conditional ablation of STAT3 only in PR-positive cells 37. Page 15, line 388: Conditional ablation of STAT3 in the uterus (Stat3d/d) results in embryo implantation failure. 38. Page 15, line 396: Space between alternative and splicing. post-translational 39. Pag