SCAR/WAVE complex recruitment to a supracellular actomyosin cable by myosin activators and a junctional Arf-GEF during Drosophila dorsal closure

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Transaction Report:

(Note: With the exception of the correction of typographical or spelling errors that could be a source of ambiguity, letters and reports are not edited. The original formatting of letters and referee reports may not be reflected in this compilation.)

RE: Manuscript #E22-03-0107
TITLE: "SCAR/WAVE complex recruitment to a supracellular actomyosin cable by myosin activators and a junctional Arf-GEF during Drosophila dorsal closure"

Dear Tony,

Thank you for submitting your manuscript, 'SCAR/WAVE complex recruitment to a supracellular actomyosin cable by myosin activators and a junctional Arf-GEF during Drosophila dorsal closure', to MBC. I have carefully reviewed the comments from your previous reviews at Development together with your responses. I agree with you that you have addressed most of the significant concerns raised by those reviewers. However, like two of the reviewers I am confused by your genetic interaction experiment. If I understand the figure correctly trans-heterozygous males and females were intercrossed and the phenotypes of the resulting offspring assayed for phenotypes. If so, I agree with reviewer 1 that the differences likely simply represent additive effects from 2 chromosomes containing deleterious mutations. A genetic interaction would require showing phenotypic enhancement from being heterozygous for one (recessive) mutation while simultaneously homozygous for the other mutation. In the experimental design described in Figure 5, because Scar and step are on the same chromosome, barring recombination in the female parents, none of the offspring are homozygous for one mutation and simultaneously heterozygous for the other. Thus, this experiment did not test for interaction between these genes (unless you invoke maternal effect, which would require a different experimental design to properly test). The comparisons between Arp3 and step are somewhat less problematic, but given that the overall lethality is consistent with additive effects rather than enhancement, I do not think this result is interpretable without being able to distinguish specific genotypes in the offspring. Given these concerns, your manuscript cannot be accepted for publication at this time.

Thank you for the opportunity to examine this work. We hope that as your studies progress you will consider submitting future manuscripts to Molecular Biology of the Cell (MBoC).

If you have any questions regarding the decision, please contact the MBoC Editorial Office (mboc@ascb.org).

Sincerely,
Rick Fehon
Monitoring Editor
Molecular Biology of the Cell

RE: Manuscript #E22-03-0107R-A
TITLE: "SCAR/WAVE complex recruitment to a supracellular actomyosin cable by myosin activators and a junctional Arf-GEF during Drosophila dorsal closure"

Dear Tony,

Thank you for submitting the revised version in the format of a brief report. I agree that in this form the manuscript is substantially improved and better conveys your findings. I am pleased to accept your manuscript for publication in Molecular Biology of the Cell. Congratulations to your and your colleagues on this work.

Best,

Rick

Richard Fehon
Monitoring Editor
Molecular Biology of the Cell

Dear Prof. Harris:

Congratulations on the acceptance of your manuscript.

A PDF of your manuscript will be published on MBoC in Press, an early release version of the journal, within 10 days. The date your manuscript appears at www.molbiolcell.org/toc/mboc/0/0 is the official publication date. Your manuscript will also be scheduled for publication in the next available issue of MBoC.

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We are pleased that you chose to publish your work in MBoC.

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