Reviewer's report

Title: AMPD1 regulates mTORC1-p70 S6 kinase axis in the control of insulin sensitivity in skeletal muscle

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Reviewer: Nigel Irwin

Reviewer's report:

* The animal model of AMPD1 needs to be fully characterized, both before expt. and after high fat feeding - e.g. did metabolic parameters change? Did the mice gain weight?
* There are issues with presentation of Figures and some titles of figure legends make very little sense.
* There needs to be more specific reasons given for differences observed between current study and reference 13. Speculation alone is not sufficient.
* Did the authors measure any real measurable parameters of insulin sensitivity? For example HOMA-IR or exogenous insulin challenge?

The paper requires some English language editing.