

## **For Reviewer 1:**

### **Major comment:**

Dear colleagues Hallo, I hope you are fine. Manuscript titled " Increased KIF21B expression is a potential prognostic biomarker in hepatocellular carcinoma" by Zhao et al. - The authors have reported the explore the role of KIF21B in hepatocellular carcinoma and its effect on prognosis after hepatectomy. -The idea is very good. The study is well-designed. The manuscript was well, concisely and coherently organized but I want to clarify some points. **1-Evaluation of immunohistochemical staining of KIF21B:** - You do not explain how you divide the cases into low or high expression. - You do not even mention if the staining is nuclear or cytoplasmic. -You depend only on percentage of positive cells. What about the intensity of staining?. Is the intensity of staining is the same in all the slides? -Also, Expression of KIF21B was independently evaluated by two technicians. In your lab, the slides are evaluated by technicians not pathologists???? **2-Figure 2 A:** -you write (The expression levels of KIF21B protein in short hairpin (sh) RNA shKIF21B-treated group of cells were significantly decreased compared to that of the shCtrl-treated group). Actually I do not find any difference in the fluorescence images. Can you explain how you interpret this result?. -Please, what you mean by GAPDH in the same figure? - I recommend to accept this article after this minor correction.

### **Answer:**

First, thanks so much for your comment and your reminder.

1.After your comment and we have discussed with our hospital pathologists about the issues of you mentioned that we have revised the methods of the evaluation of immunohistochemical staining, and revised in red. KIF21B expresses in the cytoplasmic and we have revised in the submitted manuscript.

2. Because of my expression mistake, it caused a misunderstanding for the reviewer. Fig 2A only shows that the lentivirus' infected rate is similar in shCtrl group and shKIF21B group, at 72 h after transfection, and the proportion of infected cells in both the shCtrl and shKIF21B groups had reached 80%. We have revised the inappropriate part in the manuscript.

## **For Reviewer 2:**

### **Major comment:**

The manuscript written by Zhao H. et al. examined the expression of KIF21B in HCC cell lines and HCC tissues, and analyzed the clinical significance of KIF21B in the prognosis of HCC patients. The authors report that expression of KIF21B is significantly high in HCC cell lines and HCC tissues. KIF21B knockdown by transfection of shKIF21B caused cell growth inhibition and induced apoptosis. Importantly, prognosis of HCC patients after hepatectomy was associated with the expression level of KIF21B in HCC tissues. The analyses are well done and the data are important. **Minor point 1.** In Fig 2A, expression of KIF21B analyzed by immunofluorescence in cells transfected with shCtrl and shKIF21B seems similar. Is it the constant result? If so, the data is inconsistent with the data on mRNA levels.

### **Answer:**

1. First, thanks so much for your comments. Because of my expression mistake, it caused a misunderstanding for the reviewer. Fig 2A only shows that the lentivirus' infected rate is similar in shCtrl group and shKIF21B group, at 72 h after transfection, and the proportion of infected cells in both the shCtrl and shKIF21B groups had reached 80%. We have revised the inappropriate part in

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