

Dear Editor,

This is a response letter accompanying the resubmission of our manuscript entitled “The role of NLRP3 Inflammasome in Inflammatory Bowel Diseases”. We are very happy to resubmit the revised manuscript and we would like to thank you and the reviewers for reading and making valuable comments on it. We provide point by point the answers to the reviewers’ comments. All changes are highlighted in the revised manuscript.

## **REVIEWER 1**

### ***Comment***

A few typos-- “caspase” is misspelled in “The stimulated NLRP3 interacts with ASC and pro-caspase-1 binds to ASC via CARD to assemble into a large cytosolic complex, which triggers activation of caspase-1.” 2nd paragraph of introduction “Active caspase-1 cleaves” next sentence ”This result was followed by increased numbers of immunosuppressive CD103+ tolerogenic dendritic cells” It is conventional to superscript the “+” CD103+. “NLRP3 protein, which is crucial for NLRP3 inflammasome formation, has been proved” should be “proven”

### ***Answer***

We thank the reviewer for these valuable comments. We have made the proper changes as suggested. “caspase-1”, (*page 5, line 19*); “cleave” (*page 5, line 20*); “CD103+” (*page 6, line 16; page 11, line 18; page 11, line 22*) and “has been proved” (*page 8, line 11; page 11, lines 4-5*).

## **REVIEWER 2**

### ***Comment***

Interesting, well written. It could be of considerable value for clinical practice.

***Answer***

We thank the reviewer for this comment.

**REVIEWER 3**

***Comment***

In the manuscript entitled “The role of NLRP3 Inflammasome in Inflammatory Bowel Diseases”, the authors give quite recent findings about the role of NLRP3 Inflammasome in mucosal immune response and suggest targeting NLRP3 inflammasome and its downstream signaling may provide new insights into the development of future therapeutic strategies. This is a new point of view in the inflammatory Bowel disease treatment.

***Answer***

We thank the reviewer for this comment.

**REVIEWER 4**

***Comment***

In the manuscript entitled “The role of NLRP3 Inflammasome in Inflammatory Bowel Diseases”, the authors reviewed the role of NLRP3 Inflammasome in mucosal immune response and suggest targeting NLRP3 inflammasome and its downstream signaling may provide new insights into the development of future therapeutic strategies. The title is interesting and suitable for the Journal. However, a drawing showing NLRP3 inflammasome-related components is encouraged to be added.

***Answer***

We thank the reviewer for this comment. We have added a figure illustrating the NLRP3 inflammasome-related components (*figure 1 image file; figure legend page 19*).