## NLRP2 in health and disease

Tongtong Zhang<sup>1</sup>, Fei Xing<sup>1</sup>, Mingcui Qu<sup>1</sup>, Zhihu Yang<sup>1</sup>, Yafei Liu<sup>1</sup>, Yongchao Yao<sup>1</sup>, and Na Xing<sup>1</sup>

<sup>1</sup>The First Affiliated Hospital of Zhengzhou University

January 10, 2023

## Abstract

NLR family pyrin domain containing 2 (NLRP2) is a novel member of the Nod-like receptor (NLR) family. However, our understanding of NLRP2 has long been ambiguous. NLRP2 may have a role in the innate immune response, but its specific functions remain controversial. Although NLRP2 can initiate inflammasome and promote inflammation, it can also downregulate inflammatory signals. Additionally, NLRP2 has been reported to function in the reproductive system and shows high expression in the placenta. However, the exact role of NLRP2 in the reproductive system is unclear. Here, we highlight the most current progress on NLRP2 in inflammasome activation, effector function, and regulation of nuclear factor-xB. And we discuss functions of NLRP2 in inflammatory diseases, reproductive disorders, and the potential implication of NLRP2 in human diseases.

## Hosted file

NLRP2 in health and disease .docx available at https://authorea.com/users/574645/articles/618304-nlrp2-in-health-and-disease