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Project Title	Study on gene regulation and histone lactating in cancer
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Report

Cell polarization plays an important role in the maintenance of ontogeny and organ homeostasis and involves a series of extracellular and intracellular signal exchanges and rearrangement of intracellular programs, but its molecular regulatory mechanisms are still unclear. My preliminary experiments suggested that proton-sensing GPCRs/TDAG8 can inhibit the expression of cytokines related to the LPS-induced increase of cAMP, which plays an important role in the anti-infection immunity of macrophages induced by extracellular acidification. In view of the potential effect of histone lactylation in macrophage activation polarization, the study on the immune mechanism mediated by TDAG8 provides a new thought at the level of histones. In the last year, we have produced two graduate students and three undergraduate students. At the same time, we have published two papers.