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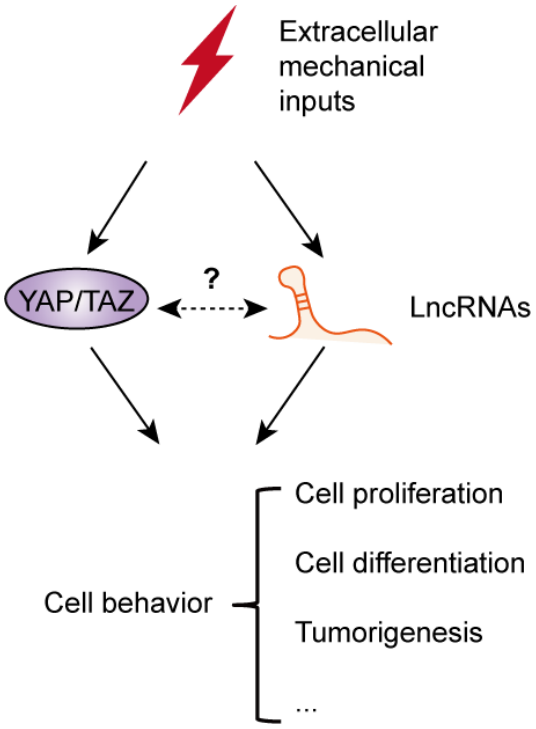
Emerging role of lncRNAs as mechanical signaling molecules in mechanotransduction and their association with Hippo-YAP signaling: a review

Key Words: YAP/TAZ, Long non-coding RNA, Mechanotransduction, F-actin

Research Summary

This review mainly focused on the mechanisms of YAP/TAZ and lncRNAs as two mechano-sensitive molecules, along with a discussion on the potential link between them. Main focus is on:

- **The crucial signal molecules involved in YAP/TAZ mechanotransduction**
- **The LATS-dependent or -independent signal pathway in mechanotransduction**
- **LncRNAs that respond to the mechanical stimuli**
- **The relationship between lncRNAs and Hippo-YAP signaling**



Innovation points

- **YAP/TAZ and lncRNA emerge as important mechano-sensitive molecules.**

- **The YAP mechanotransduction depends on or is independent of LATS kinase.**

- **LncRNA participates in regulating mechano-related cell behaviour.**

- **Some lncRNAs can integrate YAP signaling in response to extra mechanical force.**