

**Cite this as:** Wen-bo REN, Xiao-jing XIA, Jing HUANG, Wen-fei GUO, Yan-yi CHE, Ting-hao HUANG, Lian-cheng LEI , 2019. Interferon- $\gamma$  regulates cell malignant growth via the c-Abl/HDAC2 signaling pathway in mammary epithelial cells. *Journal of Zhejiang University-Science B (Biomedicine & Biotechnology)*, 20(1):39- 48.  
<https://doi.org/10.1631/jzus.B1800211>

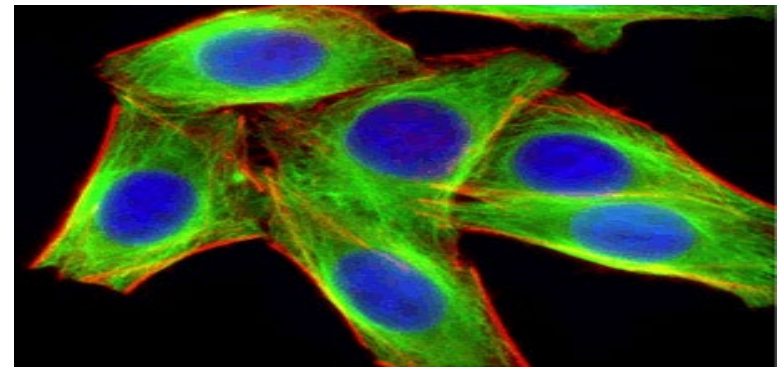
# **Interferon- $\gamma$ regulates cell malignant growth via the c-Abl/HDAC2 signaling pathway in mammary epithelial cells**

**Key words:** Interferon- $\gamma$ , (IFN- $\gamma$ ), Cellular-abelson gene (c-Abl), Histone deacetylase 2 (HDAC2), Malignant cell growth

# Research Summary

This article mainly focused on the molecular mechanism of IFN- $\gamma$  regulating cell malignant growth and verifying the relationship between IFN- $\gamma$  and breast cancer.

- ◆ IFN- $\gamma$  promotes malignant cell growth.
- ◆ IFN- $\gamma$  enhances the distribution of c-Abl in the nucleus, and then increasing the c-Abl acting on HDAC2.



# *Innovation points*

- ◆ The experimental object,  $\gamma$ -BMEC, can be better used for basic research on breast cancer, and it is a new research tool.
- ◆ In our experiment, the research that the mechanism of IFN- $\gamma$  regulating malignant cell growth, provide direct evidence for the close relationship between IFN- $\gamma$ , malignant cell transformation and even breast cancer.

