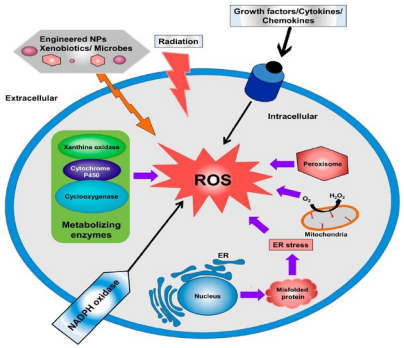
Cite this as: Yi LI, Wenyan SHE, Xiaoran XU, Yixin LIU, Xinyu WANG, Sheng TIAN, Shiyi LI, Miao WANG, Chaochao YU, Pan LIU, Tianhe HUANG, Yongchang WEI. AAZ2 induces mitochondrial-dependent apoptosis by targeting PDK1 in gastric cancer[J]. Journal of Zhejiang University Science B, 2023, 24(3): 232-247. http://doi.org/10.1631/jzus.B2200351

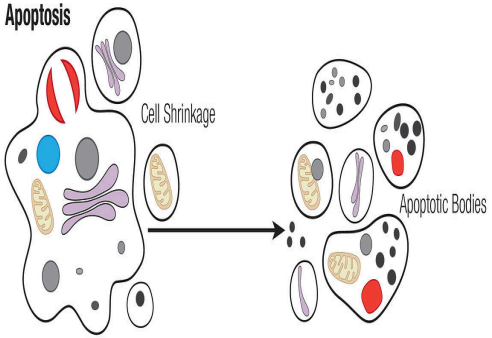
AAZ2 induces mitochondrial-dependent apoptosis by targeting PDK1 in gastric cancer

Key words: **AAZ2, gastric cancer, ROS, apoptosis, PDK1, glucose metabolism**

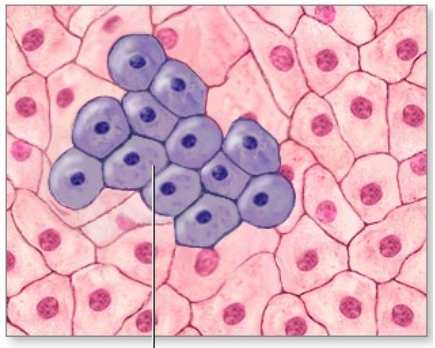
Research Summary

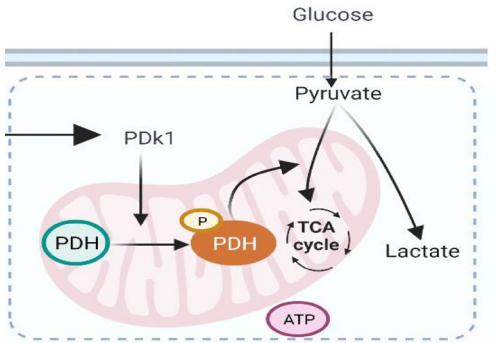
This article mainly focused on the anti-gastric cancer effects of novel organic compound AAZ2, and explored its mechanism in the following aspects:





- **Cell cytotoxicity**
- **ROS generation**
- **PDK1 and glucose metabolism**
- **PI3K/AKT/mTOR pathway inhibition**
- **Tumor growth inhibition**





Innovation points

- **AAZ2 is a kind of the novel organic compound that could inhibit GC proliferation and growth**

- **AAZ2 targets PDK1 and could induce metabolism alteration along with ROS generation**

- **AAZ2 activates mitochondrial-dependent apoptosis by the inhibition of ROS-mediated PI3K/AKT/mTOR pathway.**

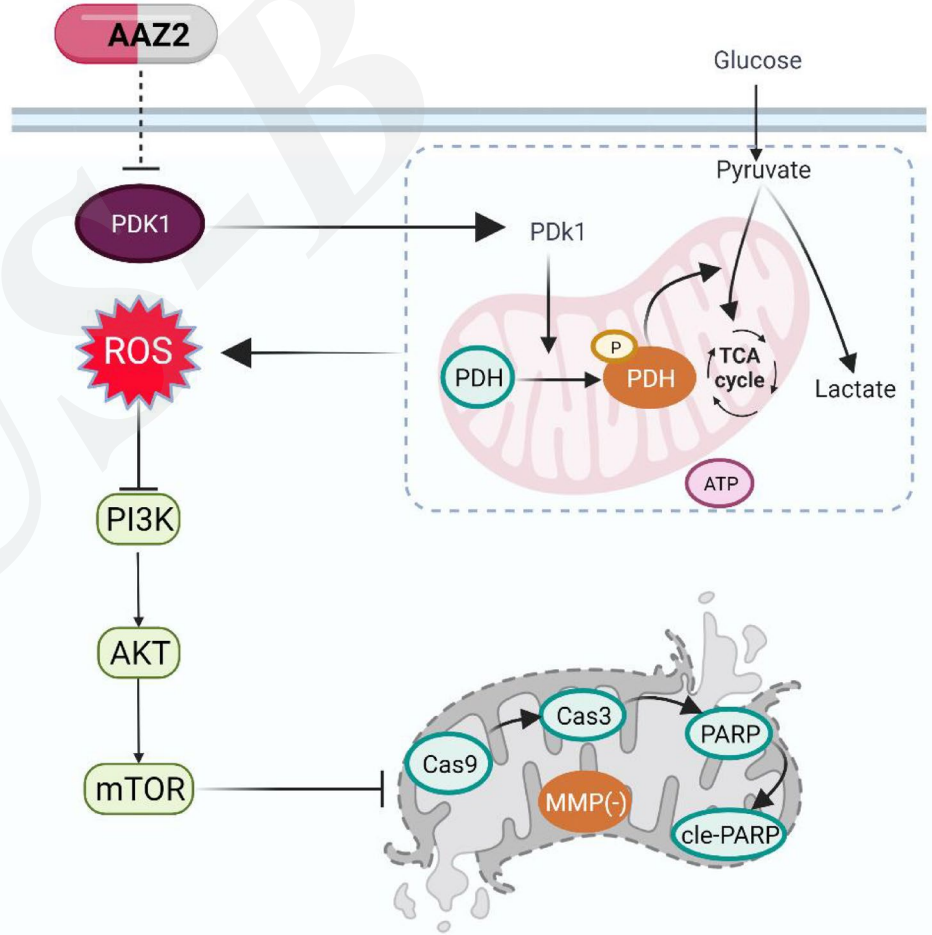


Figure 4

Innovation points

A series of comprehensive figures were generated to summarize the novel organic compound AAZ2.

Figure 1 | Synthesis and cytotoxicity of AAZ2.

Figure 2 | AAZ2 induced mitochondrial-dependent apoptosis via ROS generation.

Figure 3 | AAZ2 triggered ROS generation by targeting PDK1-mediated metabolism alteration.

Figure 4 | AAZ2 activated mitochondrial-dependent apoptosis by the inhibition of ROS-mediated PI3K/AKT/mTOR pathway

Figure 5 | AAZ2 inhibited HGC27 xenograft growth in vivo.

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