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# Heat stress inhibits proliferation, promotes growth and induces apoptosis in cultured lantang swine skeletal muscle satellite cells

**Key words:** **Heat stress, Swine, Cell proliferation, Cell growth, Apoptosis, Akt/mTOR/S6K pathway**

# *Research Summary*

**This study mainly focused on the proliferation, apoptosis and growth of Lantang swine skeletal muscle SCs are altered during heat stress(HS).**

**and summarized in the following aspects:**

- **HS suppresses SCs proliferation and promotes SCs growth.**
- **HS induces apoptosis to decrease the number of cells**
- **HS promotes SCs growth via the Akt/mTOR/S6K pathway**

# *Innovation points*

- **Introduction of the role of heat stress on SCs proliferation and apoptosis.**

- **Summary of HS suppresses SCs proliferation and induces apoptosis to decrease the number of cells.**

# *Innovation points*

- **The main finding of this study was that HS promotes SCs growth via the Akt/mTOR/S6K pathway.**