

## عنوان مقاله:

Prolonged Laboratory Maintenance of *Toxoplasma gondii* Tachyzoites in Co-cultivation with the Bovine *Theileria annulata*-Infected Lymphoblastoids

## محل انتشار:

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## خلاصه مقاله:

**Background and Aims:** In most of the studies, *Toxoplasma gondii* is maintained in laboratory mice or studied in vitro using non-lymphoid cell lines or primary mouse macrophages. The target of our research was to design a new axenic culture of *Toxoplasma gondii* tachyzoites to providing a sufficient quantity of them. **Material and Methods:** *Theileria annulata*-infected lymphoblastoids, which had been maintained up to ۲۶۰ sub-cultures to attenuate the *Theileria annulata*, were evaluated for their suitability to the cultivation of *Toxoplasma gondii* tachyzoites. This cultivation process was carried out continuously for up to ۱۰ passages, and after each ۵ sub-culture, ۰.۱ ml of culture suspension ( $1 \times 10^6$  tachyzoites) was inoculated to each BALB/c mouse. **Results:** It was observed that the tachyzoites have attacked the lympho-blastoids, multiplied inside them, and many fresh tachyzoites with typical shape and gliding movement were present in the culture suspension. In all processes of cultivation, the pathogenesis of parasites remained stable, and they were able to proliferate in mice and eventually lead to the death of the animals. **Conclusions:** We describe here a new protocol for prolonged maintenance of tachyzoites of *Toxoplasma gondii*, which is more efficient (both in terms of yield and cost (it does not need fetal calf serum)) than other traditional methods for maintenance of the parasite.

## کلمات کلیدی:

lymphoblastoid, Tachyzoites, *Theileria annulata*, *Toxoplasma gondii*  
توکسوپلازما گوندی ای، تیلریا آنولاتا، تاکی زوئیت، لنفوبلاستوئید، کشت.

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