Antibodies for the Detection of Toxoplasma Gondii Oocysts

Tech ID: 25467 / UC Case 2013-485-0

ABSTRACT

Researchers at the University of California, Davis have developed monoclonal antibodies that recognize and bind to oocysts of *Toxoplasma gondii*.

FULL DESCRIPTION

Toxoplasmosis, caused by a waterborne parasite *Toxoplasma gondii* (T. gondii), can lead to life threating birth defects, neurologic disease and death in humans.Rates of infection by T. gondii are as high as 30% in North American and most often occur by ingesting contaminated water. Despite EPA requirements that municipalities regularly test their potable water for contaminants there is currently no test available to detect T. gondii in drinking water.

Researchers at the University of California, Davis have developed monoclonal antibodies that can facilitate the detection of T. gondii in water sources. The antibody specifically binds a protein on the outer wall of an intact T. gondii oocyst to form an immunocomplex. The immunocomplex can then be used with water testing methods for the parasite to monitor water quality and improve public health for consumers.

APPLICATIONS

- Water quality testing for T. gondii

FEATURES/BENEFITS

- Immunological reagent against T. gondii
- New tool to enhance water quality testing
- Developed testing protocol based on EPA standards
- Can be used to concentrate T. gondii

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	10,429,386	10/01/2019	2013-485

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OTHER INFORMATION

KEYWORDS

water, quality, testing, parasite, antibody, Toxoplasma gondii, toxoplasmosis, T. gondii

CATEGORIZED AS

- **Biotechnology**
  - Health
  - Other
- **Research Tools**
  - Antibodies
  - Other
  - Screening Assays

RELATED CASES

2013-485-0

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