



Giardia lamblia (BDI276): sc-57743

BACKGROUND

Giardia lamblia is a flagellated protozoan parasite that infects mammalian gastrointestinal tracts and causes giardiasis, a type of gastroenteritis that manifests itself with severe diarrhea and abdominal cramps. *Giardia lamblia* infection is transmitted by consuming contaminated food or water, or through mammalian feces. The *Giardia* protozoan cannot survive in an environment outside of the host, so it is spread as a cyst, which can live in the environment for up to a month, and enters its trophozoite active form after infection. After the feeding stage, the *Giardia* trophozoite undergoes asexual replication through longitudinal binary fission. The resulting trophozoites and cysts then pass through the digestive system in the feces. The trophozoite form of *Giardia* can be recognized by its large karyosome and lack of peripheral chromatin, while the cyst form contains four nuclei and a retracted cytoplasm.

REFERENCES

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2. Lujan, H.D., Mowatt, M.R. and Nash, T.E. 1996. Lipid requirements and lipid uptake by *Giardia lamblia* trophozoites in culture. *J. Eukaryot. Microbiol.* 43: 237-242.
3. Hewan-Lowe, K., Furlong, B., Sims, M. and Schwartz, D.A. 1997. Coinfection with *Giardia lamblia* and *Enterocytozoon bieneusi* in a patient with acquired immunodeficiency syndrome and chronic diarrhea. *Arch. Pathol. Lab. Med.* 121: 417-422.
4. Svärd, S.G., Hagblom, P. and Palm, J.E. 2003. *Giardia lamblia*—a model organism for eukaryotic cell differentiation. *FEMS Microbiol. Lett.* 218: 3-7.
5. Benchimol, M. 2004. Participation of the adhesive disc during karyokinesis in *Giardia lamblia*. *Biol. Cell* 96: 291-301.
6. Benchimol, M. 2004. *Giardia lamblia*: behavior of the nuclear envelope. *Parasitol. Res.* 94: 254-264.
7. Chávez-Munguía, B., Cedillo-Rivera, R. and Martínez-Palomo, A. 2004. The ultrastructure of the cyst wall of *Giardia lamblia*. *J. Eukaryot. Microbiol.* 51: 220-226.
8. Correa, G. and Benchimol, M. 2006. *Giardia lamblia* behavior under cytochalasins treatment. *Parasitol. Res.* 98: 250-256.
9. Misra, V., Misra, S.P., Dwivedi, M. and Singh, P.A. 2006. *Giardia lamblia* trophozoites in gastric biopsies. *Indian J. Pathol. Microbiol.* 49: 519-523.

SOURCE

Giardia lamblia (BDI276) is a mouse monoclonal antibody raised against *Giardia lamblia* cysts.

PRODUCT

Each vial contains 100 µg IgG₃ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Giardia lamblia (BDI276) is recommended for detection of cysts of *Giardia lamblia* origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

SELECT PRODUCT CITATIONS

1. Espinosa-García, A.C., Díaz-Ávalos, C., Solano-Ortiz, R., Tapia-Palacios, M.A., Vázquez-Salvador, N., Espinosa-García, S., Sarmiento-Silva, R.E. and Mazari-Hiriart, M. 2014. Removal of bacteria, protozoa and viruses through a multiple-barrier household water disinfection system. *J. Water Health* 12: 94-104.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.