SANTA CRUZ BIOTECHNOLOGY, INC.

# Entamoeba histolytica (3555): sc-58125

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

*Entamoeba histolytica* is a eukaryotic, anaerobic, parasitic protozoan that is a member of the genus *Entamoeba*. This microbe mainly infects humans and other primates. The environmental survival form of *Entamoeba histolytica* is a cyst, a sack that encloses an organism during its dormant period, such as in water and soils and on foods, especially under moist conditions. The active form of this protozoa is called the trophozoite stage, and it exists only in the host and in fresh feces. When swallowed by humans, *Entamoeba histolytica* cause infections by excysting into their trophozoite stage inside the digestive tract and boring through the enteric walls to reach the blood stream, and eventually other organs. *Entamoeba histolytica* may lead to amebiasis or amebic dysentary, illnesses characterized by fulminating dysentary, diarrhea, weight loss, fatigue, abdominal pain and amebomas.

## REFERENCES


1. Melzer, H., et al. 2002. Antigenicity and immunogenicity of phage library-selected peptide mimics of the major surface proteophosphoglycan antigens of *Entamoeba histolytica*. Parasite Immunol. 24: 321-328.
2. Welter, B.H., et al. 2002. Characterization of a Rab7-l of endocytosis in *Entamoeba histolytica*. Mol. Biochem. Parasitol. 121: 254-264.
3. Akbar, M.A., et al. 2003. Genes induced by a high-oxygen environment in *Entamoeba histolytica*. Mol. Biochem. Parasitol. 133: 187-196.
4. Luna-Arias, J.P., et al. 2004. Purification of *Entamoeba histolytica* DNA containing organelles further characterization. J. Eukaryot. Microbiol. 50: 706-708.
5. Anane, S. and Khaled, S. 2005. *Entamoeba histolytica* and *Entamoeba dispar:* differentiation methods and implications. Ann. Biol. Clin. 63: 7-13.
6. Licea Ventura, M.G., et al. 2005. Presence of *Entamoeba histolytica* in chronic urethritis. Aten. Primaria 35: 269.
7. Okada, M. and Nozaki, T. 2005. New insights into molecular mechanisms of phagocytosis in *Entamoeba histolytica* by proteomic analysis. Arch. Med. Res. 37: 244-252.


## SOURCE

Entamoeba histolytica (3555) is a mouse monoclonal antibody raised against *Entamoeba histolytica*.

## PRODUCT

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

## 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.

## APPLICATIONS

Entamoeba histolytica (3555) is recommended for detection of *Entamoeba histolytica* by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500); may cross-react with toxoplasma gondii.

## SELECT PRODUCT CITATIONS


1. Sheng, H., et al. 1997. Inhibition of human colon cancer cell growth by selective inhibition of cyclooxygenase-2. J. Clin. Invest. 99: 2254-2259.
2. Ostrom, R.S., et al. 2001. Key role for constitutive cyclooxygenase-2 of MDCK cells in basal signaling and response to released ATP. Am. J. Physiol. Cell Physiol. 281: C524-C531.
3. Payner, T., et al. 2006. Microsomal prostaglandin E synthase-1 regulates human glioma cell growth via prostaglandin $E_2$-dependent activation of type II protein kinase A. Mol. Cancer Ther. 5: 1817-1826.
4. Kambe, A., et al. 2009. The cyclooxygenase inhibitor sulindac sulfide inhibits EP4 expression and suppresses the growth of glioblastoma cells. Cancer Prev. Res. 2: 1088-1099.
5. Garcia-Bates, T.M., et al. 2009. Peroxisome proliferator-activated receptor γ ligands enhance human B cell antibody production and differentiation. J. immunol. 183: 6903-6912.
6. Wendeburg, L., et al. 2009. Resveratrol inhibits prostaglandin formation in IL-1β-stimulated SK-N-SH neuronal cells. J. Neuroinflammation 6: 26.
7. Bernard, J.J. and Gallo, RL. 2010. Cyclooxygenase-2 enhances antimicrobial peptide expression and killing of *Staphylococcus aureus*. J. immunol. 185: 6535-6544.
8. Zhou, L., et al. 2013. The significance of Notch1 compared with Notch3 in high metastasis and poor overall survival in hepatocellular carcinoma. PLoS ONE 8: e57382.
9. Misra, U.K. and Pizzo, S.V. 2013. Evidence for a pro-proliferative feedback loop in prostate cancer: the role of Epac1 and COX-2-dependent pathways. PLoS ONE 8: e63150.
10. Ishikado, A., et al. 2013. 4-Hydroxy hexenal derived from docosahexaenoic acid protects endothelial cells via Nrf2 activation. PLoS ONE 8: e69415.


## RESEARCH USE

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