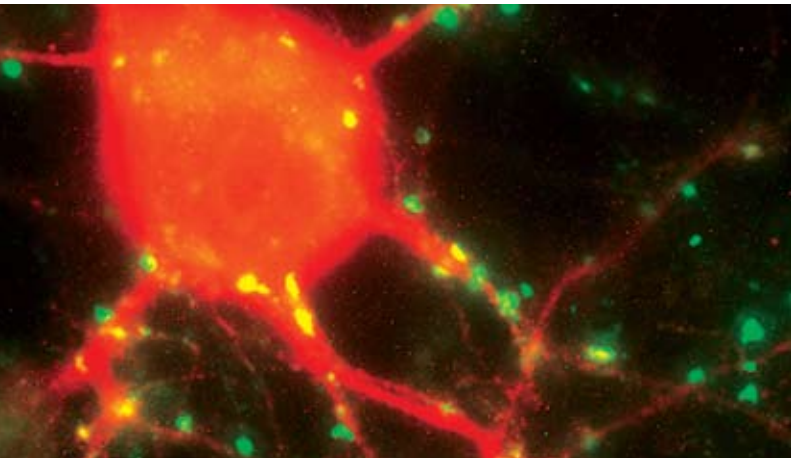
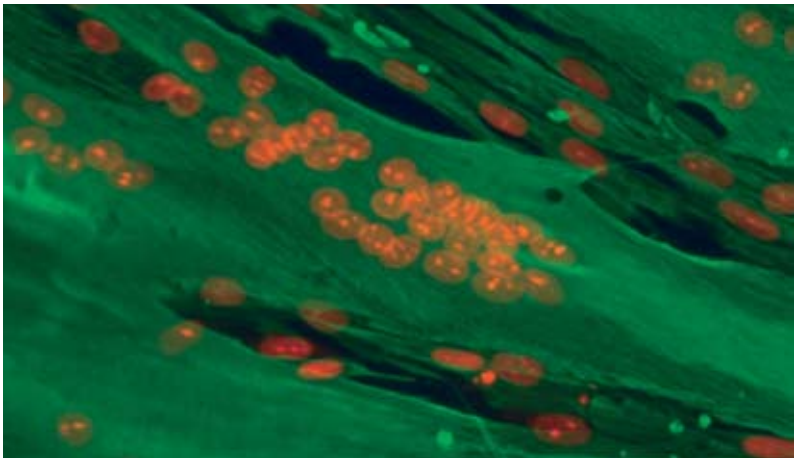
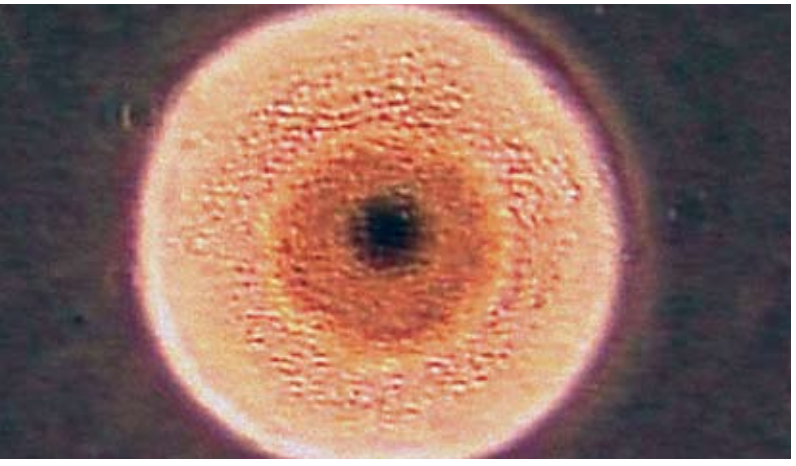
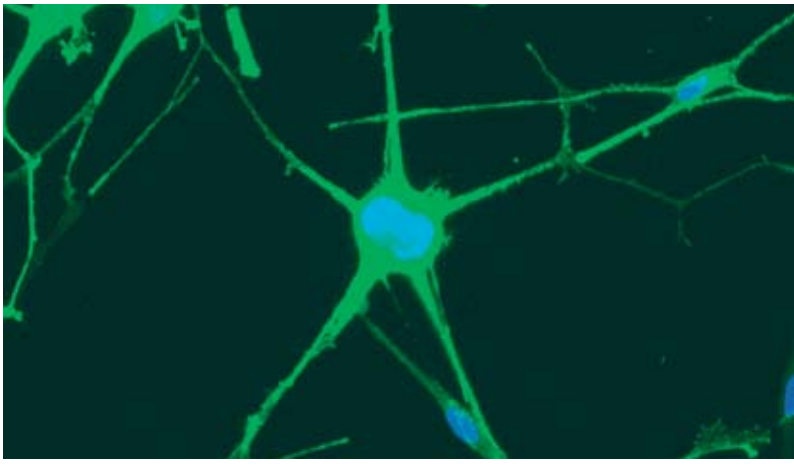
Lonza

MycoAlert® Mycoplasma Detection Kit

Have you checked your cells today?

What are Mycoplasma?

- The smallest free-living, self-replicating organisms
- Simple prokaryocytes, lacking a rigid cell wall, they range in size from 0.2 μm-0.8 μm
- Mycoplasma have limited biosynthetic capabilities, rely on their hosts for nutrients, and are usually attached to the external surface of the cell membrane
- Over 180 recognized species

What is the easiest way to detect Mycoplasma?

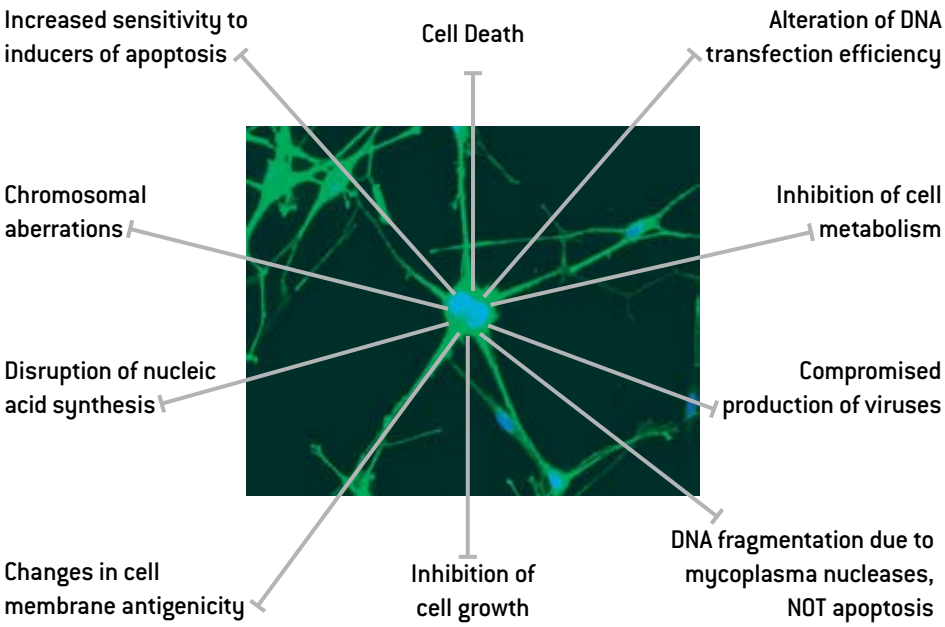
The MycoAlert® Mycoplasma Detection Kit:

- Detects mycoplasma infection in 20 minutes
- Detects the presence of mycoplasmal enzymes
- Uses the proven, sensitive luminescent assay of ATP

Simple four step procedure:

1) Add MycoAlert® Reagent to 100 μl of cell culture supernatant
2) Incubate 5 minutes and measure luminescence
3) Add MycoAlert® Substrate and incubate 10 minutes
4) Measure luminescence and calculate ratio

How does a Mycoplasma infection affect your cells?



How insidious are Mycoplasma?

Mycoplasma are the single biggest problem in the culture of continuous cell lines.

- Between 5 and 35% of cell cultures in current use are infected with mycoplasma
- 41% of contaminants reported in one study were of human origin
- Mycoplasma infections are often “invisible” - they do not cause changes in turbidity or pH
- Mycoplasma are not visible under microscopy, even at very high concentrations >10^7 cfu/ml
- Most routine antibiotics used in cell culture are ineffective against mycoplasma
- They are not routinely removed by filtration
- 95% of cell contaminations are due to six species of mycoplasma

Typical routes of infection

- Cross contamination from untested infected cells
- Aerosols created during pipetting
- Using the same bottle of medium for different cell types
- Handling more than one cell line in the hood at one time
- Contaminated materials
- Direct infection from the researcher

Ordering Information

Description	Catalog #	Size
MycoAlert® Mycoplasma Detection Kit	LT07-118	10 Tests
	LT07-218	25 Tests
	LT07-418	50 Tests
	LT07-318	100 Tests
MycoAlert® Assay Control Set	LT07-518	10 Tests

Contact Information

alphatech SYSTEMS LIMITED

Email: sales@alphatech.co.nz
Phone: 09 580 1959
Fax: 09 580 2044

Street Address:
Alphatech Systems Ltd
630a Great South Road
Greenlane
Auckland 1051

Postal Address:
Alphatech Systems Ltd
PO Box 62613
Greenlane
Auckland1546

Web: www.alphatech.co.nz

Visit our site to view our product pages and to purchase from our online store.

We have over 2000 products available for purchase

Lonza

Lonza

MycoZap™ Mycoplasma Elimination Reagent

Reports are that 5% - 35% of all cells in continuous culture are contaminated with mycoplasma. A cell line infection can affect every known process in the cell and can seriously impact the reliability, reproducibility and consistency of results. Additionally, mycoplasma infections can spread easily within the culture environment. To monitor for such infections, regular testing of cell lines should be performed using Lonza's MycoAlert® Mycoplasma Detection Kit. Where contamination has occurred, and the sample absolutely cannot be discarded, the MycoZap™ Mycoplasma Elimination Reagent has been optimized to eliminate mycoplasma with minimal toxic effects on the cells.

MycoZap™ Mycoplasma Elimination Reagent is:

- Easy – simply add the reagent to your culture media
- Universal – MycoZap™ Reagent can be used to eradicate Mollicutes, including *Mycoplasma, Acholeplasma, Spiroplasma and Entomoplasma* species in cell cultures
- Thorough – the combination of antibiotic and antimetabolic agents ensure total removal of the contamination
- Complete – contains all the required reagents

MycoZap™ Mycoplasma Elimination Reagent

Principles

The MycoZap™ Reagent eliminates mycoplasma by using a combination of antibiotic and antimetabolic agents. This approach allows for a highly reliable elimination of mycoplasma that cannot be achieved by the use of antibiotics alone. The MycoZap™ Reagent can be used to eradicate Mollicutes, including *Mycoplasma, Acholeplasma, Spiroplasma and Entomoplasma* species in cell cultures.

Cultures should be tested with the MycoAlert® Mycoplasma Detection Kit at regular intervals for 4-6 weeks after mycoplasma elimination to ensure fresh infections do not arise.

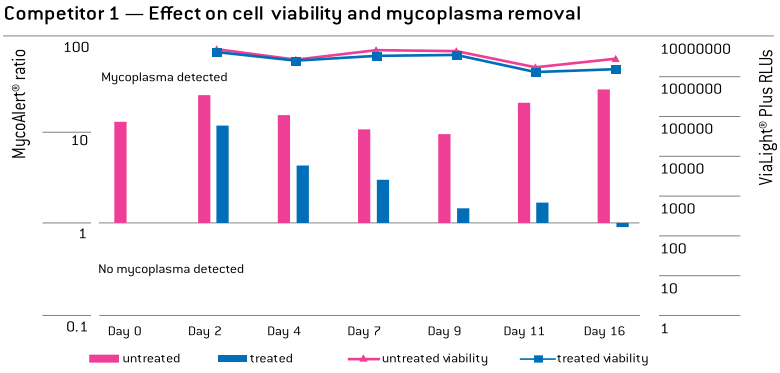


Figure 1: The competitor's product took over 2 weeks to eliminate the mycoplasma contamination.

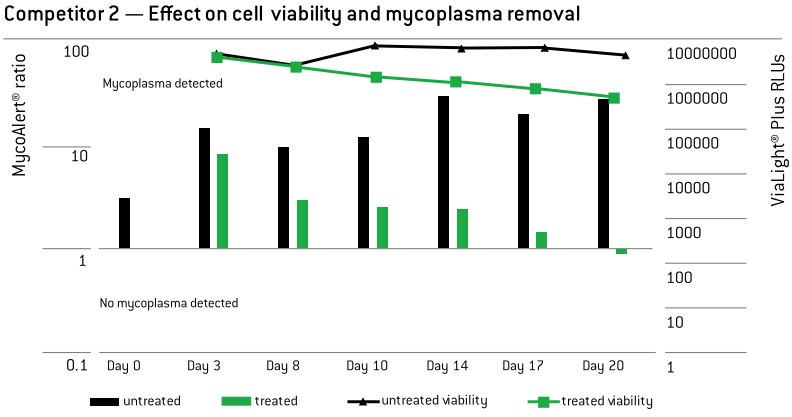


Figure 2: The competitor's product took over 2 weeks to eliminate the mycoplasma contamination and the treatment adversely affected cell viability.

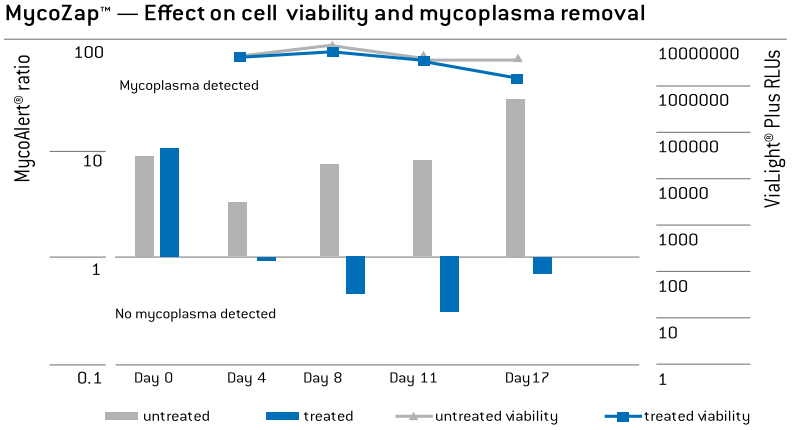


Figure 3: MycoZap™ Reagent can clear mycoplasma contamination in as few as 4 days with minimal impact on cell viability.

Ordering Information

MycoZap™ Mycoplasma Elimination Reagent

Catalog Number	Size
LT07-818	1 treatment
LT07-918	5 treatments

Contact Information

alphatech SYSTEMS LIMITED

Email: sales@alphatech.co.nz
Phone: 09 580 1959
Fax: 09 580 2044

Street Address
Alphatech Systems Ltd
630a Great South Road
Greenlane
Auckland 1051

Postal Address
Alphatech Systems Ltd
PO Box 62613
Greenlane
Auckland 1546

Web: www.alphatech.co.nz

Visit our website to see the range of products available, and to shop online

We have over 2000 items for sale in our online store

Lonza