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The Big Six – Now Available!

For nearly two decades, outbreaks of Shiga toxin-producing strains of *Escherichia coli* (STEC) have plagued the global community. As a result, six serogroups of potentially life-threatening non-O157 STEC, referred to as “the Big Six”, have been

declared as adulterants by the Food Safety and Inspection Service branch of the U. S. Department of Agriculture. This decision now requires the routine verification testing of raw beef for the presence of serogroups O26, O45, O103, O111, O121, and O145.

ATCC offers representative strains from each of the six [non-O157 STEC serogroups](#). Each strain was tested for the presence of the Shiga toxin genes (*stx1* and *stx2*) and the *eae* gene, which encodes the adherence protein intimin. Presence of these Shiga toxin antigens or genetic determinants allow for the detection of non-O157 STEC by methods including rapid enzyme immunoassay or PCR.

[Learn more ►](#)



Candida albicans Drug Resistance (CaDR) Panel – Now Available!

The emergence of antimicrobial drug-resistant strains has been steadily increasing in recent decades. This is problematic for the treatment of fungal pathogens, such as *Candida albicans*, as

there are a limited number of antifungal drugs currently available¹. To aid in the analysis and prevention of antifungal drug resistance, ATCC now offers the ATCC [Candida albicans Drug Resistance \(CaDR\) Panel \(ATCC® No. MP-8™\)](#).

The CaDR panel comprises 14 *C. albicans* strains isolated from clinical settings, including 12 strains resistant to one or more antifungal drugs and two sensitive control strains that have been either typed or sequenced. Resistant strains have confirmed resistance against anidulafungin, micafungin, caspofungin, 5-flucytosine, voriconazole, itraconazole, fluconazole, or a combination of these. Additionally, each strain has been tested for both molecular typing and antifungal susceptibility as well as

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Events and Conferences

Parental Drug Association's (PDA) Global Conference on Pharmaceutical Microbiology

Bethesda, MD
October 22-24
Booth #26

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New Products

Vibrio harveyi Panel (ATCC® No. MP-6™) – Available Now!

A panel of 9 *Vibrio harveyi* strains displaying wild-type or varying mutational phenotypes for use as a non-pathogenic, two-component regulatory system in quorum sensing.

[Learn more ►](#)

Clostridium difficile Panel (ATCC® No. MP-4-) – Available Now!

A panel of 8 *Clostridium difficile* strains, each representing a different toxinotype, including: Types 0, IIIb, IIIc, (*tcdA*-, *tcdB*-), V, VIII, XII, and XXII.

[Learn more ►](#)

Titered Mycoplasma Reference Strains Panel (ATCC® No. MP-7™) – Available Now!

A panel of 10 mollicutes with genome copy number to CFU ratios < 10:1.

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ATCC Publications

ATCC® Bacterial Culture Guide – Download Today!

A manual featuring tips and techniques for culturing bacteria and

analyzed for variance in the D1D2 region of the large subunit ribosomal RNA gene.

¹Huang M, Kao, KC. Population dynamics and the evolution of antifungal drug resistance in *Candida albicans*. FEMS Microbiol Lett (2012) 333(2):85-93. [Learn more ►](#)



Webinar

September 6, 2012 1:00 PM

Robert Molestina – Biological Resources of the ATCC Protistology Collection

Protists are eukaryotic microorganisms commonly studied due to their ecological relevance in aquatic food chains and their impact on human health. Protistology research and comparative studies are dependent on the accessibility of authenticated biological standards. This presentation will provide an overview of biological resources available in the ATCC Protistology Collection, a discussion on the methods of characterization, benefits of depositing, current research projects, and future perspectives.

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Toxoplasmosis – Resources for Foodborne Diseases

Toxoplasmosis is currently considered by the CDC to be one of the leading causes of death attributed to foodborne illness. *Toxoplasma gondii* is transmitted to humans through the consumption of undercooked meat from infected animals, contact with contaminated cat feces, or via transplacental transmission. In healthy individuals, toxoplasmosis is relatively asymptomatic and self-limiting. However, this illness can silently affect pregnant women and result in severe consequences for the fetus including neurological conditions or death². *T. gondii* also affects immune-compromised individuals, resulting in cerebral or extra-cerebral toxoplasmosis³.

Due to difficulties in parasite isolation the existing method of diagnosis uses serological methods to detect *Toxoplasma*-specific IgG, IgM, and IgA antibodies^{1,4,5}. In recent studies, the use of an IgG avidity ELISA assay could detect the presence of *T. gondii* and aid in determining whether the infection was acute or chronic⁶. However, these methods are limited in the detection of reactivated toxoplasmosis in immune-compromised patients⁷. Currently, ATCC offers over 60 strains of *Toxoplasma gondii*, among other species of parasitic protozoa, for the continued research of foodborne diseases.

[Learn more ►](#)

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