

Toxoplasma gondii, Strain SF42

Catalog No. NR-49193

Product Description: *Toxoplasma gondii* (*T. gondii*), strain SF42 is a recombinant F1 clone selected from progeny of a genetic cross between a sinfungin-resistant line of the highly virulent Type I GT-1 strain (GT1-SNF^R) and a 5-fluoro-2'-deoxyuridine-resistant line of the non-virulent Type II ME49 strain (ME49 FUDR^R).

Lot^{1,2}: 64079280

Manufacturing Date: 22FEB2016

TEST	SPECIFICATIONS	RESULTS
Cell Morphology	Report results	Refractile and oval-shaped
PCR Assay of Extracted DNA^{3,4} AK56 locus	~ 520 base pair amplicon	~ 520 base pair amplicon
Genotypic Analysis^{3,4} Sequencing of AK56 locus (~ 490 base pairs) AK56 locus (<i>MfeI</i> digestion)	Consistent with <i>T. gondii</i> Consistent with parental Type I strain	Consistent with <i>T. gondii</i> (Figure 1) Consistent with parental Type I strain
Viable Cell Count by Hemacytometry (pre-freeze)	> 10 ⁶ cells/mL	5.8 × 10 ⁷ cells/mL
Viability (post-freeze)⁵	Viable parasites	Viable parasites
Sterility (21-day incubation) Harpo's HTYE broth ⁶ , 37°C and 26°C, aerobic Tryptic Soy broth, 37°C and 26°C, aerobic Sabouraud Dextrose broth, 37°C and 26°C, aerobic DMEM with 10% FBS, 37°C, aerobic Sheep Blood agar, 37°C, aerobic Sheep Blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic	No growth No growth No growth No growth No growth No growth No growth	No growth No growth No growth No growth No growth No growth No growth
Mycoplasma Contamination DNA Detection by PCR	None detected	None detected

¹NR-49193 was produced by cultivation of the deposited material in human foreskin fibroblast cells (ATCC[®] CRL-1634[™]) with cell cultivation medium for parasites (ATCC[®] medium 2222: adjusted to contain 10% heat-inactivated fetal bovine serum). The culture was propagated for 6 days at 37°C in an aerobic atmosphere with 5% CO₂ until lysis of the host cell monolayer was reached.

²Quality control testing completed on post-freeze material unless specified as pre-freeze.

³PCR amplification of the AK56 locus was performed. Samples were subjected to restriction enzyme digestion typing by agarose gel electrophoresis.

⁴Primer sequences, annealing temperatures, and conditions for restriction enzyme digestion may be obtained at the *Toxoplasma* Genome Map website ([Toxoplasma Genome Map](http://ToxoplasmaGenomeMap.org)).

⁵Viable cells and signs of infection were seen after 4 days under cultivation conditions at 37°C.

⁶Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

Figure 1: AK56 (Chromosome II) Amplicon Sequence

```

TTTTATTAGG TTTTCCGTTG TTTTCGCGGA GTCGTCTGAG CTCGGCACTC GCTGCTTTTC AAAATCTCGT TTCAACGTAT
CGCGGCGCCG TCACCGCGCG CAATCCACTG TGATGCATGA TTCTGTTTCT AAAAAGTGGC CATTTTAGCC GGCTCGTTTT
TGCATACGTT TGGACCATAA AACCTCGTAT TGTGGAAGAA GAATGCAATT GGTGCTGTG CTGATCACCG TATGAAAATC
GGCGTGTCTC GCCCCCTGCC GTGTGCGCGT CCGCTTTTTG CGACCCCGGT ACACCCGTTT TTTGTGGTCA GCGAGGAACG
CACTTTTGCT GTTATTGTTT ACTTTTCAGC GTAACACTGA CCCCTTTTAT CGTGGCAGGA AACGAACCTT CAGCAAGAAT
TTTCGAGCAC TACTGCGTCG CAGCAGCCTA GTGGGGTGGG CACGCATGTG CAGGACGGAC AGAAACTGCA AGCTTGTTC
GCAGGCTAAA ACT
    
```

Date: 04 OCT 2016

Signature:



BEI Resources Authentication

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

