

**Toxoplasma gondii, Strain SF58**

**Catalog No. NR-49198**

**Product Description:** *Toxoplasma gondii* (*T. gondii*), strain SF58 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<sup>R</sup>) and a 5-fluoro-2'-deoxyuridine-resistant line of the non-virulent Type II ME49 strain (ME49 FUDR<sup>R</sup>).

**Lot<sup>1,2</sup>: 64286519**

**Manufacturing Date: 27MAY2016**

| TEST   | SPECIFICATIONS  | RESULTS   |
|--|---|---|
| <b>Cell Morphology</b>   | Report results  | Refractile and oval-shaped  |
| <b>PCR Assay of Extracted DNA<sup>3,4</sup></b><br>AK56 locus  | ~ 520 base pair amplicon  | ~ 520 base pair amplicon  |
| <b>Genotypic Analysis<sup>3,4</sup></b><br>Sequencing of AK56 locus (~ 520 base pairs)<br>AK56 locus ( <i>MfeI</i> digestion)  | Consistent with <i>T. gondii</i><br>Consistent with parental Type I strain              | Consistent with <i>T. gondii</i> (Figure 1)<br>Consistent with parental Type I strain   |
| <b>Viable Cell Count by Hemacytometry (pre-freeze)</b>   | > 10 <sup>6</sup> cells/mL  | 1.0 × 10 <sup>8</sup> cells/mL  |
| <b>Viability (post-freeze)<sup>5</sup></b>   | Viable parasites  | Viable parasites  |
| <b>Sterility (21-day incubation)</b><br>Harpo's HTYE broth <sup>6</sup> , 37°C and 26°C, aerobic<br>Tryptic Soy broth, 37°C and 26°C, aerobic<br>Sabouraud Dextrose broth, 37°C and 26°C, aerobic<br>DMEM with 10% FBS, 37°C, aerobic<br>Sheep Blood agar, 37°C, aerobic<br>Sheep Blood agar, 37°C, anaerobic<br>Thioglycollate broth, 37°C, anaerobic | No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth | No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth |
| <b>Mycoplasma Contamination</b><br>DNA Detection by PCR  | None detected   | None detected   |

<sup>1</sup>NR-49198 was produced by cultivation of the deposited material in human foreskin fibroblast cells (ATCC<sup>®</sup> CRL-1634™) with cell cultivation medium for parasites (ATCC<sup>®</sup> medium 2222: adjusted to contain 10% heat-inactivated fetal bovine serum). The culture was propagated for 3 days at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> until lysis of the host cell monolayer was reached.

<sup>2</sup>Quality control testing completed on post-freeze material unless specified as pre-freeze.

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

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

<sup>5</sup>Viable cells and signs of infection were seen after 1 day at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub>.

<sup>6</sup>Atlas, 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**

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GTCCTTTTCC CCACTGCTTT TATTAGGTTT TTCCGTGTTT TCGCGGAGTC GTCTGAGCTC GGCAC'TCGCT GCTTTCCAAA
ATCTCGTTTC AACGTATCGC GGCGCCGTCA CCGCGCGCAA TCCACTGTGA TGCATGATTC TGTTTCTAAA AACTGCGCAT
TTTAGCCGGC TCGTTTTTGC ATACGTTTGG ACCATAAAAC CTCGTATTGT TGAAGAAGAA TGCAATTGGT GTCTGTGCTG
ATCACCGTAT GAAAATCGGC GTGTCTCGCC CCCTGCCGTG TCGCGTCCG CTTTTTGCGA CCCC'GGTACA CCCGTTTTTT
GTGGTCAGCG AGGAACGCAC TTTTGCTGTT ATTGTTCACT TTTCAGCGTA AACTGACCC CTTTCATCGT GGCAGGAAAC
GA'ACTCTCAG CAAGAATTTT CGAGCACTAC TGC'GTGCAG CAGCCTAGTG GGGTGGACAC GCATGTGCAG GACGGACAGA
AACTGCAAGC TTGTTCCGCA GGCTAA'AACT CGCGRAATCC ATCA
    
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**Date:** 14 DEC 2016

**Signature:**



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