



Product Sheet

# *Phytophthora infestans* (ATCC® MYA-4127™)

Please read this FIRST

Storage Temp.  
**Frozen: -80°C or colder**  
**Freeze-Dried: 2°C to 8°C**  
**Live Culture: See Propagation Section**

Biosafety Level  
**1**

## Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

## Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: *Phytophthora infestans* (ATCC® MYA-4127™)

American Type Culture Collection  
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Manassas, VA 20108 USA  
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Or contact your local distributor

## Description

**Strain Designation:** T30-4

**Product Description:** An ampoule containing viable cells (yeast cells, spores, or agar cubes with mycelia) suspended in cryoprotectant.

## Propagation

The information recommended in this section is to assist users in obtaining living culture(s) for their studies. The recommendation does not imply that the conditions or procedures provided below are optimum. Experienced researchers may initiate the growth of a culture in their own way.

ATCC® Medium 322: Lima bean agar

ATCC® Medium 343: V8 juice agar

ATCC® Medium 1970: V8 rye agar

ATCC® Medium 2232: YM medium with biotin 30 mcg/L and thiamine 600 mcg/L

## Growth Conditions

**Temperature:** 20°C

**Atmosphere:** Typical aerobic

## Recommended Procedure

**Frozen ampoules** packed in dry ice should either be thawed immediately or stored in liquid nitrogen. If liquid nitrogen storage facilities are not available, frozen ampoules may be stored at or below -70°C for approximately one week. **Do not under any circumstance store frozen ampoules at refrigerator freezer temperatures (generally -20°C).** Storage of frozen material at this temperature will result in the death of the culture.

1. To thaw a frozen ampoule, place in a 30°C water bath for 5 min. Immerse the ampoule just sufficient to cover the frozen material. Do not agitate the ampoule.
2. Immediately after thawing, wipe down ampoule with 70% ethanol and aseptically transfer at least 2-3 agar cubes of the content onto a plate or broth with medium recommended.
3. Incubate the inoculum/strain at the temperature and conditions recommended.
4. Inspect for growth of the inoculum/strain regularly. The sign of viability is noticeable typically after 7-10 days of incubation. However, the time necessary for significant growth will vary from strain to strain.

## Notes

Thawing the frozen ampoule at the recommended temperature and time is very important for better recoverability from the frozen form; keep moist during incubation; this strain may require a primary growth period in a nutrient broth containing trace amount of biotin and thiamine (ATCC® Medium 2232) before it will grow on any subculture attempts.

Additional, updated information on this product may be available on the ATCC® web site at [www.atcc.org](http://www.atcc.org).

## DNA Sequence

18S ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence  
AAGGATCATTACCACACCTAAAAACTTTCCACGTGAACCGTTTCAACCCAATAGTTGGGGTCTTACTT  
GGCGGGCGCTGCTGGCTTTATTGCTGGCGGCTACTGCTGGGCGAGCCCTATCAAAGGCGAGCGTTTG  
GACTTCGGTCTGAGCTAGTAGCTTTTTTATTTAAACCCCTTACTTAATACTGATTATACTGTGGGGACGA  
AAGTCTCTGCTTTAACTAGATAGCAACTTTCAGCAGTGGATGTCTAGGCTCGCACATCGATGAAGAAC  
GCTGCGAACTGCGATACGTAATGCGAATTGCAGGATTCAGTGAGTCATCGAAATTTGACGCATATT  
GCACCTCCGGTTAGTCCGGAAGTATGCCCTGTATCAGTGTCCGTACAACAACCTTGGCTTTCTCCCTTC  
CGTGTAGTCCGTGGAGGAGATGCCAGATGTGAAGTGTCTTGCAGTTGGTTTTTCGGACCGACTGCGAGT  
CCTTTTAAATGTAATAACTGACTTCTCTTTGCTCCAAAAGTGGTGGCATTGCTGGTTGTGGACGCTGC  
TATTGTAGCGAGTTGGCGACCGGTTTGTCTGCTGCGGCTTAATGGAGAAATGCTCGATTCTGGTATG  
GTTGGCTTCGCTGAACAATGCGCTTATTGGGTGATTTTCTGCTGTGGCGTGATGGACTGGTGAACCA  
TGGCTCTTAGCTTGGCATTTGAATCGGCTTTGCTGTTGCGAAGTAGAGTGGCGGCTTCGCTGCCGAG  
GGTCGATCCATTTGGGAAATGTTGTGTACTTCGGTATGCATCTCAATTGGACCTGATATCAGGCAAGAT  
TACCCGCTGA

D1D2 region of the 28S ribosomal RNA gene  
CATCTCAATTGGACCTGATATCAGGCAAGATTACCCGCTGAACTTAAGCATATTAATAAGCGGAGGAA



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AAGAACTAACAAGGATTCCCCTAGTAACGGCGAGTGAAGCGGGAAGAGCTCAAGCTTAAAATCTCC
GTGCAAGTTTTGCGCGGCGAATTGTAGTCTATAGAGGCGTGATCAGTGTGGGCGCTTGGGGCAAGTTC
CTTGAAGAGGACAGCATGGAGGGTGACTCCCGTTCATCCCTGAGTTGCTCGTGCATACGATCCGTT
TTCTTTGAGTCGCGTTGTTTGGGAATGCAGCGCAAAGTAGGTGGTAAATCCATCTAAAGCTAAATATT
GGTGCGAGACCGATAGCGAACAAGTACCGTGAGGGAAAGATGAAAAGAAGCTTTGAAAAGAGAGTTA
AAGAGTACCTGAAACTGCTGAAAGGGAACCGAATCGTTTCCAGTGTCTATAATCCGTGGTATATTTTCAT
TGGCGAGTGTGTGCGTGCCTGTGCTGTGCGCAGCGGCTTTTTGGCTGCGCTCGCGTGTGTGCTGTGTG
GCTTGTGTTGCCCTGTGCTGCGGTGGGACGTCAAGGTCAGTTCGTATGCTGCGGAAATGGCCGCCG
AGGAGGTAGGGCTTACGCTTTCGTTTGTCTGTTATATCTTGGTGGACGAGTAGTCGCGGTTGGACTGA
GGTGCTTACAACGTGTTTTGAGTGGGCTGTGCTCTGTGTGCGCCGTGTGCGGATAGCTTGTATGCG
TGTGTGTTGTGTGTTGATTGATGTGGTTTTAACTTGTG
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### Isolation

Potato (*Solanum tuberosum*), Netherlands.

### References

References and other information relating to this product are available online at [www.atcc.org](http://www.atcc.org).

### Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

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### Disclaimers

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Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).  
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