Product Sheet

Aurantiochytrium limacinum (ATCC® MYA-1381™)

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: Aurantiochytrium limacinum (ATCC® MYA-1381™)

Description

Strain Designation: SR21 [IFO 32693]
Deposited Name: Schizochytrium limacinum Honda et Yokochi
Product Description: An ampoule containing viable cells 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 790: By+ medium
ATCC® Medium 633: M3 chytrid agar
ATCC® Medium 683: Koch’s K-1 medium

Growth Conditions

Temperature: 18°C to 22°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 25°C to 30°C water bath, until just thawed (approximately 5 minutes). 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 50 µL (or any amount desired up to all) of the content onto a plate or broth with medium recommended.

3. Incubate the inoculum/strain at the temperature and conditions recommended.

4. Inspet for growth of the inoculum/strain regularly. The sign of viability is noticeable typically after 2-3 days of incubation. However, the time necessary for significant growth will vary from strain to strain.

Notes

Culture morphologically looks pure. But ITS sequence suggests it may have different rDNA operons. Additional, updated information on this product may be available on the ATCC® web site at www.atcc.org.

DNA Sequence

Partial sequence of 18S ribosomal RNA gene, 5’ end
GTGTAAGTATAAGCGATTGTACTGTGAGACTGCGAACGGCTCATTATATCAGTAATAATTTCTTCGGTATGGTTTCTTTTATATGGATACCTGCAGTAATTCTGGAAATAATACATGCTGTAAGAGCCCTGTATGGGGCTGCACTTATTAGGTATGAAGCGGATTTTATTGGTGAATCATGATAATTGAGCAGATTGACTTTTTGGTCGATGAATCGTTTGAGTTTCTGCCATCAGTTGTCGACGGTAGTGTATTGGACTACGGTGACTATACGGGTGACGGAGAGTTAGGGCTCGACTCCGGAGAGGGAGCCTGAGAGACGGCTACCATATCCAAGGATAGCAGCAGGCGCGTAAATTACCCACTGTGGACTCCACGAGGTAGTGACGAGAAATATCGATGCGAAGCGTGTTATGCGTTTTGCTATCGGAATGAGAGCAATGTAAAACCCTCATC

Partial sequence of 18S ribosomal RNA gene, 3’ end
tTGGAATTGATGCTCTGTGCGAGAGGCGCCTGCTATCTTGGAAGCCTCTATCGTGGCTGGCTAGATTTTGCGAATGTAATTACCACCCACCTGAGCTCCACCGAGGTAGTGACGAGAAATATCGACGCGAGCTGTAGCGGCGATGACGCAAGCAATGTAAACCCCTGATCG

Isolation

Seawater in mangrove area, Colonia, Yap Islands, Micronesia

References

DNA Sequence

Partial sequence of 18S ribosomal RNA gene, 5’ end
GTGTAAGTATAAGCGATTGTACTGTGAGACTGCGAACGGCTCATTATATCAGTAATAATTTCTTCGGTATGGTTTCTTTTATATGGATACCTGCAGTAATTCTGGAAATAATACATGCTGTAAGAGCCCTGTATGGGGCTGCACTTATTAGGTATGAAGCGGATTTTATTGGTGAATCATGATAATTGAGCAGATTGACTTTTTGGTCGATGAATCGTTTGAGTTTCTGCCATCAGTTGTCGACGGTAGTGTATTGGACTACGGTGACTATACGGGTGACGGAGAGTTAGGGCTCGACTCCGGAGAGGGAGCCTGAGAGACGGCTACCATATCCAAGGATAGCAGCAGGCGCGTAAATTACCCACTGTGGACTCCACGAGGTAGTGACGAGAAATATCGATGCGAAGCGTGTTATGCGTTTTGCTATCGGAATGAGAGCAATGTAAAACCCTCATC

Partial sequence of 18S ribosomal RNA gene, 3’ end
tTGGAATTGATGCTCTGTGCGAGAGGCGCCTGCTATCTTGGAAGCCTCTATCGTGGCTGGCTAGATTTTGCGAATGTAATTACCACCCACCTGAGCTCCACCGAGGTAGTGACGAGAAATATCGACGCGAGCTGTAGCGGCGATGACGCAAGCAATGTAAACCCCTGATCG

Isolation

Seawater in mangrove area, Colonia, Yap Islands, Micronesia

References
Aurantiochytrium limacinum (ATCC® MYA-1381™)

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: *Aurantiochytrium limacinum* (ATCC® MYA-1381™)

References and other information relating to this product are available online at www.atcc.org.

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.

ATCC Warranty

ATCC® products are warranted for 30 days from the date of shipment, and this warranty is valid only if the product is stored and handled according to the information included on this product information sheet. If the ATCC® product is a living cell or microorganism, ATCC lists the media formulation that has been found to be effective for this product. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this product. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans. While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials. Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at www.atcc.org.

© ATCC 2019. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [08/13]