# *Sulfolobus acidocaldarius* Brock et al.

33909™

## Description

*Sulfolobus acidocaldarius* strain DSM 639 is a type strain that was isolated in 1970 from a hot spring at Yellowstone National Park. This thermophilic acidophile is propagated in revised *Sulfolobus* medium at 70°C. This strain is part of the National Park Service (NPS) Special Collection.

**Strain designation:** DSM 639 [98-3, ATCC 27360, IFO 15157, JCM 8929]
**Deposited As:** *Sulfolobus acidocaldarius* Brock et al.
**Type strain:** Yes

## Storage Conditions

**Product format:** Freeze-dried
**Storage conditions:** 2°C to 8°C

## Intended Use

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

## BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies

and procedures as well as any other applicable regulations as enforced by your local or national agencies.

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

## Growth Conditions

**Medium:**
ATCC Medium 1723: Revised Sulfolobus medium
**Temperature:** 70°C
**Atmosphere:** Aerobic

## Handling Procedures

1. Open vial according to enclosed instructions.
2. Withdraw approximately 0.5 to 1.0 ml from a tube of #1723 broth (5 to 6 ml)

and rehydrate the entire freeze-dried pellet. Take 0.5 ml of the suspension and transfer to a second tube of broth. Incubate tubes at 70°C.

3. Plate out a portion of the suspension onto a non-selective medium and incubate aerobically at 37°C to test for purity.
4. After two to three days, growth is indicated by turbidity that settles to the bottom of the test tube and is easily resuspended when the test tube is inverted. When examined microscopically the cells appear as large cocci, generally as single cells sometimes as pairs.

## Notes

The culture will remain viable for up to one week when stored at room temperature. Use a large inoculum (10% or greater) for subsequent transfers. Growth is detectable within 24 hours and no later than 72 hours.

Additional information on this culture is available on the ATCC web site at www.atcc.org.

## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Sulfolobus acidocaldarius* Brock et al. (ATCC 33909)

## References

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

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## Revision

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## Contact Information

ATCC
10801 University Boulevard
Manassas, VA 20110-2209
USA
US telephone: 800-638-6597
Worldwide telephone: +1-703-365-2700
Email: tech@atcc.org or contact your local distributor