**Designation:** 42BKT  
**Deposited Name:** Sulfurimicrosoma lithotrophicum

**Medium**  
ATCC® Medium 2690: MJ Base and Sea Water Medium, BAA-797

**Growth Conditions**  
**Temperature:** 26-30°C  
**Atmosphere:** Anaerobic or microaerophilic

**Propagation Procedure**
1. Prepare tubes to be inoculated by exchanging the gas in the head space for fresh N₂-CO₂. Growth occurs chemolithoautrophically with elemental sulfur or thiosulfate as an electron donor and with oxygen or nitrate as an electron acceptor and using CO₂ as the carbon source. The optimum concentration of oxygen is 5%. When grown anaerobically the culture is stimulated by the addition of sodium sulfide (0.05% final concentration). The medium does not need to be pre-reduced before inoculation.
2. Open vial according to enclosed instructions.
3. Using a single tube of #2690 broth (5 to 6 ml), withdraw approximately 0.5 to 1.0 ml with a Pasteur or 1.0 ml pipette. Rehydrate the entire pellet.
4. Aseptically transfer this aliquot back into the broth tube. Mix well.
5. Use several drops of the suspension to inoculate additional tubes of broth, agar slants and/or plates.
6. Incubate the tubes and plates at 26-30°C for 2-3 days under anaerobic or microaerophilic conditions.

**Notes**
Within 2 to 3 days growth should be evident by turbidity in the broth tube(s).

**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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