



Product Sheet

## BM-N (ATCC® CRL-8910™)

Please read this **FIRST**



### Intended Use

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

### Complete Growth Medium

The base medium for this cell line is IPL-41 Insect Cell Culture Medium with glutamine (available from Sigma or Gibco). To make the complete growth medium, add the following components to the base medium:

- 2.6 g/L Tryptose Phosphate Broth (TPB)
- 0.069 mg/L ZnSO<sub>4</sub>·7H<sub>2</sub>O
- 3.86 mg/L AlCl<sub>3</sub>·6H<sub>2</sub>O
- 5 mg/L chlorophenol red
- 2g/L NaCl
- 10% heat-inactivated insect grade fetal bovine serum

Adjust pH to 6.3 to 6.4 by adding 1N NaOH  
Adjust osmolality to 317 to 360 by adding extra NaCl

The IPL-41 medium formulation was devised for use in a free gas exchange with atmospheric air. A CO<sub>2</sub> and air mixture is detrimental to cells when using this medium for cultivation. (In Vitro 17: 495-509, 1981)

### Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: BM-N (ATCC® CRL-8910™)

### Description

**Organism:** *Bombyx mori*, silkworm  
**Growth Properties:** mixed: adherent and suspension

### Batch-Specific Information

Refer to the Certificate of Analysis for batch-specific test results.

### SAFETY PRECAUTION

ATCC highly recommends that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials 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 vessel exploding or blowing off its cap with dangerous force creating flying debris.

### Unpacking & Storage Instructions

1. Check all containers for leakage or breakage.
2. Remove the frozen cells from the dry ice packaging and immediately place the cells at a temperature below -130°C, preferably in liquid nitrogen vapor, until ready for use.

### Handling Procedure for Frozen Cells

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To insure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

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1. Thaw the vial by gentle agitation in a **27°C** water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 minutes).
2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.
3. Transfer the vial contents to a centrifuge tube containing 9.0 ml complete growth medium and spin at approximately 125 x g for 5 to 7 minutes.
4. Discard the supernatant and resuspend the cell pellet in an appropriate amount of fresh growth medium.
5. Transfer the vial contents to an appropriate size vessel.

Incubate the culture at **27°C** in a suitable incubator. The IPL-41 medium formulation was devised for use in a **free gas exchange with atmospheric air**. A CO<sub>2</sub> and air mixture is detrimental to cells when using this medium for cultivation.

### Handling Procedure for Flask Cultures

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The flask was seeded with cells (see specific batch information) grown and completely filled with medium at ATCC to prevent loss of cells during shipping.

1. Upon receipt visually examine the culture for macroscopic evidence of any microbial contamination. Using an inverted microscope (preferably equipped with phase-contrast optics), carefully check for any evidence of microbial contamination. Also check to determine if the majority of cells are still attached to the bottom of the flask; during shipping the cultures are sometimes handled roughly and many of the cells often detach and become suspended in the culture medium (but are still viable).
2. **If the cells are still attached**, aseptically remove all but 5 to 10 ml of the shipping medium. The shipping medium can be saved for reuse. Incubate the cells at **27°C in air atmosphere** until they are ready to be subcultured.
3. **If the cells are not attached**, aseptically remove the entire contents of the flask and centrifuge at 125 xg for 5 to 10 minutes. Remove shipping medium and save. Resuspend the pelleted cells in 10 ml of this medium and add to 25 cm<sup>2</sup> flask. Incubate at **27°C in air atmosphere** until cells are ready to be subcultured.



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### Subculturing Procedure

#### Medium Renewal: Once per week

Gently resuspend attached cells in old culture medium by pipetting old medium across the cells on the floor of the flask.



### Cryopreservation Medium

#### Cryoprotectant Medium

Complete culture medium described above supplemented with 10% (v/v) DMSO. Cell culture tested DMSO is available as ATCC Catalog No. 4-X.



### Comments

The line should be cultivated at 27C.



### 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.

### ATCC Warranty

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### Disclaimers

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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](http://www.atcc.org)

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

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