

Following are the other advantages of the system:

- ▲ Completely dry storage area
- ▲ Warmest temperature of -190°C at vapour phase
- ▲ Microprocessor controlled automatic monitoring and alarms for deviations from the set values of levels and temperatures
- ▲ Automatic maintenance of LN<sub>2</sub> level

Cell lines, hybridomas and protein expressing clones of mammalian cells can be stored in the facility as an alternate storage facility to avoid the loss of clones.

#### WHO CAN STORE

The LN<sub>2</sub> storage system can be used as cell repository by various departments in TANUVAS, other institutions and needy researcher / entrepreneurs, provided the cells are certified / proven to be free from bacteria, fungus, mycoplasma and other relevant adventitious viral agents.

#### TERMS AND CONDITIONS FOR STORAGE

Revival and survival of cells depend on various factors including the status of cells during cryo-preservation, cryo-preservation procedure and storage until the material is transferred to TRPV B. TRPV B has the right to check the cells randomly for adventitious agents without informing the faculty. If the cells are found positive for the adventitious agents, the cells will be discarded.

### SUPPLY OF CELL LINES FOR RESEARCH PURPOSE

Cell lines available with TRPV B will be provided to academic institutions for research use with a nominal charge. A purchase agreement will be signed by the purchasing institution for using the cells for non-commercial purpose. The cells will be provided with mycoplasma-free, bacterial and fungal contamination-free certification. Additional charge will be levied for getting bovine and porcine adventitious virus-free status for the cell lines. Following cell lines are available for purchase

1. Vero cells
2. BHK 21 monolayer cells
3. A72 cells
4. Sf9 cells
5. MDBK cells
6. MDCK cells
7. HEK 293 T cells

### CONTACT

#### The Project Director

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Phone – 044 – 25556275 – 77

**Cost for the above services will be provided on request**



## CLEAN ROOM USE, LIQUID NITROGEN STORAGE FACILITY AND CELL LINE SUPPLY



**TRPV B**

**Translational Research Platform for Veterinary Biologicals**  
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**Tamil Nadu Veterinary and Animal Sciences University (TANUVAS)**  
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[www.trpvb.org.in](http://www.trpvb.org.in)

## ABOUT TRPVΒ

TRPVΒ is a unique partnership programme between Department of Biotechnology and Tamil Nadu Veterinary and Animal Sciences University in the field of Translational Research for Veterinary Biologicals. The research team includes an amalgamated combination of academia / industry and regulatory experts who can leverage and assist clients in various stages of product development. It is housed in one of the leading Veterinary Universities in India which provides the much needed academic ambience to act as a knowledge hub for information resources.

## CLEAN ROOM FACILITY

Academic institutions in India including TANUVAS is focusing on the development of newer and better diagnostic and control measures against the infectious diseases of animals. Though the academic institutions of India possess adequate scientific acumen to develop the technologies, unavailability / inaccessibility to the cGMP structural requirements impede them in meeting the quality standards. This impose additional burden on the manufacturing companies which acquire the technology from any academic institution. The companies need to repeat the

seed development and other testing procedures at their cGMP certified facility as per the stipulated regulatory norms, and these processes often take years to complete. To fill this gap and also to facilitate seamless transfer of the technologies from the academia to industry, TRPVΒ-TANUVAS had created a state of the art clean room facility meeting cGMP norms (ISO class 7 and class 8 air classifications).

- ▲ The facility is available for use by interested industry, institutions, entrepreneurs and start-up companies on payment basis
- ▲ The facility can be utilized for a specific purpose for a particular duration

## PROPOSED UTILITY

- ▲ cGMP grade vaccine seeds and vaccine substrates (cell lines) can be produced with the requisite QC testing and documentation as per the regulatory norms. These seeds can be used directly as vaccine banks anywhere in the world
- ▲ cGMP grade test batches (intended for clinical trials) can be produced with the requisite QC testing and documentation as per the regulatory norms

- ▲ The facility can be utilized for process optimization at pilot scale
- ▲ The facility can be utilized as a repository for cGMP vaccine seeds and cell banks

## LN<sub>2</sub> CRYO STORAGE FACILITY FOR CELLS

Mammalian cell lines, clones and hybridomas with potential application in research and commercialisation are being developed by various research organisations. These clones are cryo-preserved in LN<sub>2</sub> for long time storage and usage. The TRPVΒ's clean room facility is equipped with a mammalian cell line storage facility. The LN<sub>2</sub> freezer system has a capacity to store 15,600 numbers of 2 ml vials in vapour phase. The storage system is with clearly sorted racks and boxes at a vapour phase. This freezer is attached with TEC 3000 Controller that enables automated monitoring of LN<sub>2</sub> levels and temperature. The system is attached with a 230 lt LN<sub>2</sub> storage container from which the LN<sub>2</sub> level in the cryovial storage container is automatically maintained.



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