

FACT SHEET/ TERMS AND CONDITIONS: Cell Health Package

(10th July 2024)

FEATURES

- Cell Health Package
 - The cell health package encompasses comprehensive range of assays designed to evaluate the health and viability of cells through flow cytometry.
 - Cell health package is used to evaluate the health of cells critical for any experiment as well as to explore effect of certain drugs on your cell lines.
 - It includes the analysis of cell cycle, detection of apoptosis, and measurement of reactive oxygen species (ROS).
 - **Cell cycle analysis:**
 - As a cell advances through the cell cycle, its overall DNA content can serve as an indicator of the specific stage within the cell cycle.
 - Cultured mammalian cells are incubated in presence of a test material, positive and negative controls for desired time point to determine the biological response of these cells *in vitro* using appropriate biological parameters.
 - Propidium Iodide (PI), a nuclear staining dye will be used to detect the DNA content in the cells.
 - Report consists of test method and tables of percentage of population of cells in different phases of cell cycle as compared to control.
 - **Apoptosis detection:**
 - In apoptotic cells, cells undergo certain morphological changes wherein Phosphatidyl serine present in the inner lining is flipped outside. Annexin V has a high affinity for PS, and binds to cells with exposed PS. The membranes of dead and damaged cells are permeable to propidium iodide whereas viable cells with intact membranes exclude propidium iodide.
 - Cultured mammalian cells are incubated in presence of a test material, positive and negative controls for desired time point to determine the biological response of these cells *in vitro* using appropriate biological parameters.
 - Annexin V and propidium iodide staining is used to distinguish between live, apoptotic, and necrotic cells, offering insights into cellular apoptosis processes.
 - Report consists of test method and tables of percentage of population that are live, early apoptotic, late apoptotic and necrotic as compared to controls.
 - **ROS measurement:**
 - Cells that are environmentally stressed usually contain greatly increased levels of reactive oxygen species (ROS).
 - DCHFDA detects ROS by undergoing oxidative conversion to a fluorescent product in the presence of ROS, which can be detected by flow cytometry.
 - Cultured mammalian cells are incubated in presence of a test material, positive and negative controls for desired time point to determine the biological response of these cells *in vitro* using appropriate biological parameters.
 - Report consists of test method and tables of fold change of ROS generation as compared to control.
 - Experiments include a negative and positive control only for reference. Researcher specified control studies are treated as separate experiments.
- Venture Center offers this as a service and we are willing to work with researchers on new method development/ new cell lines etc.
- Venture Center only supports researchers with scientific data. Venture Center is not an accredited testing lab. Venture Center does not provide certificates. This data cannot be used for any certifications/ approvals. Venture Center does not offer to certify or confirm data in front of any agency or any court of law.

ELIGIBILITY

- The Cell health package service is open to all researchers and technology developers. However, priority shall be given to:
 - Proof-of-concept studies aiming to create to start-ups
 - Requests from incubatee companies (resident and AIP)
- At this time, Venture Center can only offer this service to a limited number of applicants. In this context, Venture Center retains the right to refuse applications without providing a reason.

TERMS & PRICING

- GENERAL CONDITIONS:

- This service sheet only offers standardized experimental protocol. The terms and conditions are specifically for these standardized studies. All publications, posters and presentations by researchers using CHP data from Venture Center are expected to acknowledge use of Venture Center facilities as follows in the acknowledgement section: "Cell Health Package Studies were performed by _____ at the DBT-BIRAC supported Venture Center BioIncubator at CSIR-NCL, Pune, India"
- Any studies involving intellectual inputs relating to design of experiments or new method development etc are treated different from the above-mentioned standardized studies. Such collaborative efforts involving Venture Center staff have to be approved by the Venture Center management on a case-to-case basis. The terms of engagement shall be different in these cases. Typically, in these cases, Venture Center requires that all publications, posters and presentations by researchers using CHP studies data generated with intellectual contributions from Venture Center staff be acknowledged through co-authorship.
- Experiments can fail for various reasons. Venture Center shall not be liable for the loss of samples and time in this case.
- **HOW TO APPLY?**
 - Request a discussion meeting with the Venture Center Lab Manager OR write to lab@venturecenter.co.in
 - Fill and submit application form. Venture Center raises an invoice against this application form. Payments are expected in full in advance prior to start of IVC studies.
- **PAYMENT TERMS**
 - All services are offered against advance payment in full. Service tax and other taxes applicable at the prevailing rate shall in addition to the above.
 - Payment via a) Demand Draft, b) Cheque payable in Pune or at par or c) bank transfer are possible. All payments have to be made in the name of "Entrepreneurship Development Center"
 - Booking once made shall not be transferrable or payment made thereof shall be non-refundable. On the occasional case where Venture Center is unable to carry out the experiment due to equipment failure or contamination or absence of staff, Venture Center shall inform the applicant immediately and refund the payments made to it.
- **USAGE TERMS**
 - Service users shall not (intentionally or otherwise) do or say anything to suggest that Venture Center or CSIR-NCL has any connection to the samples being studied.
 - Venture Center shall maintain records of CHP studies for each applicant. These will be made available to the applicant prior to billing. User agrees that in case of any dispute, Venture Center's assessment of the number of samples / number of hours and fees applicable will be considered final and the same shall be used for billing purposes.
 - Venture Center reserves the right to deny use of its services at its sole discretion, without providing any reason whatsoever. In case of scheduling conflicts, Venture Center will be the sole and final authority on the schedule and availability of the CHP studies.

- **PRICING**

Cell Health Package		Price
CHP-01	Cell cycle analysis	Rs. 5000 per test material
CHP-02	Apoptosis detection	Rs. 5000 per test material
CHP-03	ROS measurement	Rs. 5000 per test material
CHP-04	Combined package (of all three above)	Rs. 7500 per test material

- **DISCOUNTS**

Venture Center's standard discounts shall apply. See latest discounts at: <http://www.venturecenter.co.in/discounts.php>

It is hereby declared that the undersigned has read and understood the terms and conditions of Venture Center's CHP test services and accepts the same.

Name of the authorized signatory

For and on Behalf of
(Name of the Company)

Designation