

together...



...we can do wonders!



**HI TECH
SOLUTIONS**

ASSISTED REPRODUCTIVE TECHNOLOGY

An ISO 9001:2008 Registered Company



HI-TECH CRYOBANK

The Sperm's world



Advantages:

- Ready to use
- Minimum 20-30 million motile sperm with 50-70% progressive rate in each vial
- Highly qualified donor
- Infection tested: HIV, VDRL, HCV, HBsAg, Thalassemia, Chlamydia, Hemoglobin & urine
- Q. C. Tested : Sperm survival, Sperm Function, Sperm count & motility, Mortality percentage and pH
- Quarantined period of minimum for six month
- Doner selection based on educational qualification and medical history of family, genetic and basic semen parameters.
- Matching option: Blood group, Rh factor, Height, Body structure, Skin color, Hair color, Eyes color.

Sperm Processing Media



CRYO-DENS 1

Single Layer Density Gradient Solution
10 X 2 ml High density for separation of motile spermatozoa
10 x 5 ml Human tubal fluid for washing of sperm pellet

Advantages:

- **Maximum Survival Time of 30+ Hours**
 - Increase yield percentage ● Increases fertility rate ● Removes bacteria
 - Removes ROS level ● Removes abnormal and immature sperms
 - Removes white cells, pus cells and cell debris
- Single test ampoule packing, no chance of cross contamination



CRYO-DENS 2

10 X 1 ml Lower layer (90%) density for separation of motile spermatozoa
10 X 1 ml Upper layer (45%) density for separation of motile spermatozoa
10 x 5 ml Human tubal fluid for washing of sperm pellet



MODIFIED HTF / MODIFIED HAM-F10

10 x 5 ml Modified HTF / Modified HAM-F10 for washing spermatozoa.

IVF Media Products

... for the Next Generation

InVitroCare® PROTEIN and REAGENTS

HUMAN SERUM ALBUMIN

100 mg/ml total protein (weight/volume) in normal saline
Formulated with therapeutic grade Human Serum Albumin
Parent HSA used to formulate this product is derived from blood from CBER licensed Blood Banks
All donors used to obtain the Human Albumin were individually tested and found to be non-reactive for HbsAg, HCV and antibodies to HIV-1 and HIV-2 by approved testing methods
12 month shelf life at 2-8°C
Cat # 2101 - 12 x 5ml

PVP

10% Polyvinylpyrrolidone in HEPES buffered HTF
Ready-to-use solution
12 month shelf life at 2-8°C
Cat # 2210 - 1ml

HYALURONIDASE

100 EU/ml of Hyaluronidase in HEPES buffered HTF
Ready-to-use solution
6 month shelf life at 2-8°C
Cat # 2212 - 1ml

ACIDIC TYRODES

Ready-to-use solution
12 month shelf life at 2-8°C
Cat # 2211 - 1ml

InVitroCare® IVF MEDIA SERIES

HTF HEPES

For egg retrieval, follicle flushing, ICSI procedures and cryopreservation
Formulated with EDTA and a stabilized form of glutamine
12 month shelf life at 2-8°C
Cat # 2002 - 100ml or Cat # 2002-5 - 500ml

HTF

For use as a fertilization medium and for early embryo culture through 2PN stage
Formulated with EDTA and a stabilized form of glutamine
120 day shelf life at 2-8°C
Cat # 2001 - 100ml

IVC-ONE™

For early embryo development from Day 0 through compaction
Glucose and Phosphate Free
Formulated with EDTA, Glutathione, and a stabilized form of glutamine
120 day shelf life at 2-8°C
Cat # 2006 - 100ml

IVC-TWO™

For use in Day 3 embryo transfers and ICSI procedures
Low Glucose and Phosphate Free
Formulated with EDTA, Glutathione, and a stabilized form of glutamine
120 day shelf life at 2-8°C
Cat # 2008 - 100ml

IVC-THREE™

For extended embryo culture and transfer through expanded Blastocyst (Day 5)
Phosphate Free and elevated levels of Glucose
Supplemented with amino acids and vitamins
Formulated with Glutathione
120 day shelf life at 2-8°C
Cat # 2007 - 100ml



In Vitro Care

incorporated

8415 Progress Drive, Suite F
Frederick, MD 21701
800 786 1986 ~ 301 360 9660
fax 301 360 9661
www.invitrocare.com

Hi Tech ART Equipments

IUI Equipments

CENTRIFUGE MACHINE



Compact Model for Medical Laboratories. The special features include easy lid lock, Safety fuse and elegant front panel. Built in digital timer & step less knob to control the speed digital display of speed & time on screen. Head swing out with 8X15ml tubes.

MICROSCOPE



Monocular / Binocular / Trinocular

For use in clinical & biological laboratories ideally suited for semen analysis, morphology, medical collages, hospital & higher education.

SPERM VIEWING CAMERA



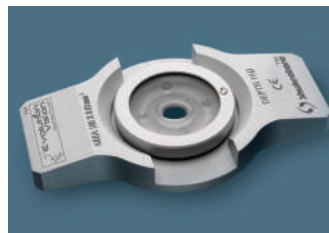
Digital Eyepiece for video capturing
Just connect with microscope to computer and capture morphology, motility counts of semen & other pathological use.

LAMINAR FLOW



0.3 microns HEPA Filters, 99.97% filtration efficiency Work table covered with Stainless Steel. Fitted with Static pressure Indicator (Manometer). Stabilisation through UV - Germicidal Tubes Size 2"x2"x2" or 4"x4"x4"

SHUKRATARA[®] Sperm Counting Chamber



To achieve all in one step on a single chamber which is Evolution-Vision's Shukratara[®] – the sperm counting chamber for evaluating the sperm concentration in a desired specimen as well as motility percentage also in the same focus of microscope.

SEMEN WARMER



A precise microprocessor based temp. Controller with digital display, PT 100 sensor with accuracy of 0.5c & digital key pad to set temp.
Aluminum block for semen collection container, straight centrifuge tube & inclined at an angle of 30c for swim up technique.

Hi Tech ART Equipments

IVF Equipments

AIR PURIFIER



Remove Odor & Smoke,
Ionizer, Detoxification, Low
Energy Consumption
Pre Filter
Activated Carbon Filter
Hepa Filter with INTERSEPT
Insecticide
Ultraviolet Anti- Bacteria Layer
Photo Catalyst Anti-Bacterial
Layer
Negative Ions Air Freshner
Layer
Available in 2 models Pur Air
200 & Pur Air 400

MICROMANIPULATOR SYSTEM ICSI



Nikon and Narishige
developed this high precision,
compact micromanipulator
system in response to
increasing demand from the
IVF/ICSI market. Whatever the
application – IVF (in-vitro
fertilization), ICSI
(intracytoplasmic sperm
injection), electrophysiology, or
biotechnology – the NT88-V3
and other high
quality micromanipulation
equipment from Nikon will meet
the task.

OVUM ASPIRATION PUMP



With foot operated switch with
vacuum gauge and regulator.
Specification:
♦ Low pressure; 0-666 mbar ♦
Volume of Over flow vessel;
2/100ml
♦ Connecting for aspiration
Tubing; 2 to 4 mm ♦ Power
supply 230 V
♦ Power point 50 VA ♦ Nominal
Current; 220 mA
♦ Power line isolation 0.315 AT

IR CO2 SENSOR HERACELL 150



Thermo Scientific Hera cell i
series CO2 incubators are
available in non corrosive
stainless steel or 100% pure
antimicrobial copper.
Thermo Scientific Hera cell i
CO2 incubators provide the
ideal in vitro
environment: clean, reliable
and easy to use, protecting
valuable samples while
optimizing cell growth with fast
recovery characteristics and
convenient touch screen user
interface.

POSITIVE PRESSURE WITH A.C.



The application of these
Evolution Vision makkee
pressure module is used in a
small cleanrooms to kep the
positive pressure inside . it's
takes place in the IVF-ICSI
LAB for the protection of the
product from the dust in the
following areas.
Pharmaceutical micro-biology,
IVF-ICSI lab, food, electrical,
Cosmetic industry & Hospital
OT
The unit is ideal to protect the
product from particular
contamination with the help of
class 100 air.

NIKON SMZ 745T BINO/TRINOCULAR MICROSCOPE



Featuring a zoom
magnification of 7.5X and a
long working distance of
115mm, Nikon SMZ745
microscopes are well suited for
both industrial and biomedical
applications. The adoption of a
new total reflection prism
produces brighter images with
higher contrast, and the anti-
mold design allows the
microscope to be used in
environments where the
temperature and humidity are
high. The SMZ-745T trinocular
model comes equipped with a
microscope camera port and a
built-in 0.55x c-mount adapter,
permitting direct mounting of

Hi Tech ART Disposables



Centrifuge Tube
Pasture
Pipette
Semen Container
IUI Catheter

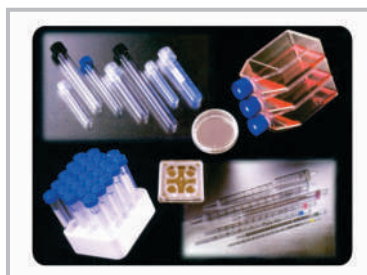
Powder free hand gloves



Vaginal probe cover



Falcon IVF Disposables



Denuding Pipette

Microtool used for Denuding of Embryos and Oocyte



Semtrac Vision Set

Sure View embryo transfer catheter set, especially designed for ultrasound guided placement



Follicle Aspiration Set

Custom made superior Fas Single Lumen

- All disposables are sterilized.
- Individually or pair packaging in sterilization indicator pouch
- Medical grade plastic
- Batch, Lot, Manufacturing and Expiry date indicated on product sticker

Sperm Freezing Media

SpermPlus⁺ Freeze

(Cat. no. SPF1006)

SpermPlus⁺ Freeze is a chemically balanced based (without egg yolk) freezing medium for cryopreservation of human semen specimen used in assisted reproductive procedure. It contains sucrose & glycerol as cryoprotective agents and gentamicin as an antibiotic.

It clinically tried and proven to give excellent sperm motility and other post thaw parameters.

Contains: HSA, sucrose, Glycerol, potassium chloride, sodium chloride, magnesium chloride, sodium phosphate, HPLC water, EDTA, sodium bicarbonate, D-glucose and Gentamicin. All ingredients are cell culture grade.

Advantages:

Small volume pack size to avoid cross contamination

Give maximum motility percentage post thaw

Increase survival time and success rate

More protection during freezing step

Long period shelf life of one year

Pack: 1x 5 ml, 10x2 ml



Sperm Function

Sperm Morphology

Test - I : Sperm pH
To determine Semen pH

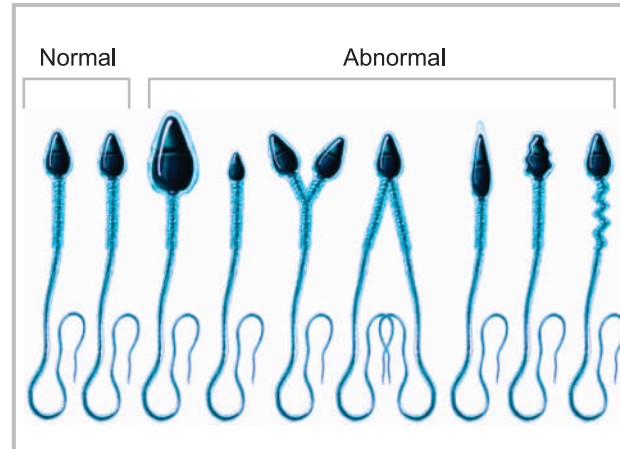
Test - II:
Membrane integrity of Sperms
Physical Intactness of Sperm

Evaluation of physical intactness of sperm membrane by supra vital staining.

This test provides estimation of motility with good internal control. The sum of dead spermatozoa (i.e. Stained) and motile spermatozoa (i.e. Stained) and motile spermatozoa (i.e. unstained) should not be more than 100%

Test - III
Morphology Stain

Evaluate defects of Head, neck and tail of sperm.



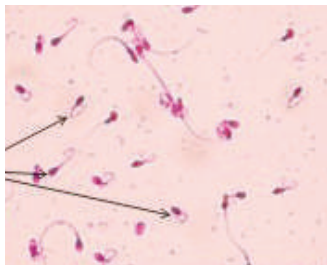
Sperm Function

hTS-HOST Test:

Hypo-Osmotic Swelling Test

This test evaluates response of spermatozoa to hypo-osmotic stress. This test is a good index of healthy spermatozoa.

Coiled Tail



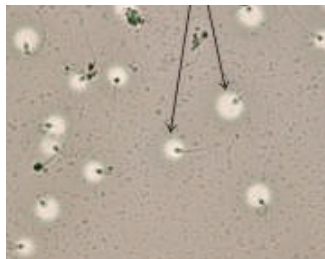
Normal : More than 60 % spermatozoa with tail coiling

hTS-AIST Test:

Acrosome Intactness Slide Test

This test evaluates the functional status of sperm acrosome and is a good indicator of sperm's ability to penetrate the oocyte investments.

Halos Spermatozoa



Normal : More than 50 % spermatozoa with Halos.

hTS-NCDT Test:

Nuclear Chromatin Decondensatin Test

This test can be used to find out whether decreases in fertilising potential has relation to sperm head chromatin.

Decondensed Head



Normal : More than 70 % decondensed head (in dark colour)

Manufacturers & Service Provider:

**IUI
VF
CSI**

**MEDIA
DISPOSABLES
& EQUIPMENT**

SEMEN BANKING

**FROZEN DONOR
SEMEN SAMPLES**



HI-TECH CRYOBANK
The Sperm's world



ASSISTED REPRODUCTIVE TECHNOLOGY
An ISO 9001:2008 Registered Company

39/1, Ground Floor, Opp. IDBI Bank, Main Shivalik Road,
Begumpur, Malviya Nagar, New Delhi - 110017 (India)

Hello: +91 11 26691486, 26693949
Mobile: 09873359592, 09868158293

e-mail : hitech_so@yahoo.com, hitechcryobank@gmail.com
www.hitechso.com, www.hitechcryobank.com