

HUMAN SEMEN ANALYSES

Leja[®] disposable counting chambers

Human semen

Leja recommends the use of the **WHO laboratory manual for the examination and processing of human semen – Sixth Edition**.

Leja slides can be used for manual semen analyses according to WHO protocols of sperm motility, detection of presence of round cells and cells other than spermatozoa and for precise sperm counts.

Based on the same protocols and in combination with Computer Assisted Semen Analyses (CASA) systems Leja slides can be used for detailed motility analyses, precise sperm counts, detection of other cells and certain morphology analyses.

Loading of Leja[®] slides

It is advised to warm the slides for 2 minutes on a clean and dust free warming plate before filling and analyses.

Load the sample into the chamber using a positive displacement pipette. Homogenize the sample before pipetting slowly from the centre of the tube.



Hold the pipette at an approximate angle of 45° and slowly deposit the indicated volume in the entry port depicted A, B, .. etc..

Allow the sample to fill the chamber by capillarity – do not push liquid in the chamber with the pipette. Remove excess fluid from the entry port with a cotton swab to avoid drift. Do not overfill the counting chamber as this will yield in false results.

Analyses

Place the slide under the objective of the microscope or in the tray of the CASA system without touching the optical reading area. Slides are ready for analyses immediately after filling.

Leja slides are tested on absence of influences on sperm cell motility and counts and can therefore be used for analyses during several minutes.

If you need to calculate your specific sample's Segre-Silberberg correction factor, then keep a stopwatch ready. Start the stopwatch when you start the liquid displacement on the pipette. When the front of the liquid (meniscus) reaches the far end of the chamber (opposite the entry port), stop the stopwatch, and record the filling time. Instructions on our website www.leja.nl on how to obtain this factor

Rule of thumb for human sperm:

- semen diluted in culture medium correction factor : 1.23
- normal liquefied semen correction factor : 1.1 (filling > 7 – 9 sec.)
- very viscous semen correction factor : 1 (filling > 30

For sperm cells that have been removed from their protein-based environment through sperm washing and that are diluted in standard extenders addition of Motixcell or Easybuffer (IMV Technologies, France) is advised for representative analyses.

Using Leja[®] slides in CASA

Leja slides are designed for use with CASA systems. The CASA system must be properly set up and calibrated, according to its manufacturer's instructions. The reading positions of the CASA system must be set at a minimum distance of 3 fields from the resin track.

If the CASA system cannot correct for the S_x factor, you will have to do this manually.

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