Mature Sperm Select (HA binding assay media)

CLEMENTE ASSOCIATES INC.

Sperm medium containing hyaluronan with moderate viscosity. The mixture is highly effective at identifying and immobilizing mature spermatozoa prior to Intra Cytoplasmic Sperm Injection (ICSI).
Sperm DNA damage and fragmentation could occur due to various external factors such as temperature change, centrifugation, delayed handling and processing after ejaculation. Such could impair the fertilization rate, embryo rate of development and quality. Implantation and pregnancy rates.
Mature spermatozoa selection helps select sperm with the lowest DNA fragmentation and damage in the cohort. Since 30 – 40 % of infertility is related to male factor, a means for maturity selection before ICSI is of great importance to help avoid early miscarriages attributed to male factor, and help provide better embryo development and quality.

Applications

- Considered as a nontoxic replacement for toxic PVP in the sperm selection process.
- Higher embryos development and cleavage rates.
- Higher embryo quality compared.
- Lower rates of chromosomal aneuploidies & DNA fragmentation.
- Higher chromosomal integrity for selected sperm.
- Lower rates of early pregnancy loss following ICSI.

Hyaluronan is one of the cumulus oophorous complex components which surrounds the oocyte and is regarded as an important biomarker for sperm maturity and quality. Only fully mature sperm that have completed the last crucial stages of spermatogenesis have fully functioning receptors for Hyaluronan. Mature spermatozoa response to Hyaluronan results in sperm immobilization and tail vigorous movement. The highest quality of spermatozoa possible within the ejaculate can be identified using Hyaluronan binding biomarker. (J Assist Reprod Genet. 2010 Jan; 27(1): 13–16. Published online 2009 Dec 30. doi: [10.1007/s10815-009-9380-0].)

Publications

-Use of hyaluronan in the selection of sperm for intracytoplasmic sperm injection (ICSI): significant improvement in clinical outcomes—multicenter, double-blinded and randomized controlled trial
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3545641/
-Intracytoplasmic sperm injection: a novel selection method for sperm with normal frequency of chromosomal aneuploidies.
https://www.ncbi.nlm.nih.gov/pubmed/16359962
- ‘‘Physiologic ICSI’’: Hyaluronic acid (HA) favors selection of spermatozoa without DNA fragmentation and with normal nucleus, resulting in improvement of embryo quality
https://www.fertstert.org/article/S0015-0282(09)00598-6/pdf
-Are sperm DNA fragmentation, hyperactivation, and hyaluronan-binding ability predictive for fertilization and embryo development in in vitro fertilization and intracytoplasmic sperm injection?
https://www.ncbi.nlm.nih.gov/pubmed/23290739
-Hyaluronan-binding system for sperm selection enhances pregnancy rates in ICSI cycles associated with male factor infertility
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5365191/
-Efficiency of hyaluronic acid (HA) sperm selection
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2826621/
-Sperm selection with hyaluronic acid (PICSI) improves LBR in IVF treatments
https://www.fertstert.org/article/S0015-0282(17)30915-9/

For more information
Email: info@pylon-healthcare.com **Website:** www.Pylon-Healthcare.com **Phone:** +20 122 555 6925, +20 1000 922 377 , +20 38520295

PYLON HEALTHCARE