

halotech®

Halosperm®

Versatile, easy and cost effective

The Halosperm® SCD technique allows the measurement of Sperm DNA Fragmentation in an easy and quick manner, with no need of complex laboratory equipment.

Sperm DNA integrity balanced with other semen parameters provides clinicians with important information to help select the most appropriate therapy for the couple.

The **Halosperm®** kits family facilitates an exhaustive semen analysis with independent and complementary information to the conventional seminogram by providing specific data points about the quality of the genetic material.

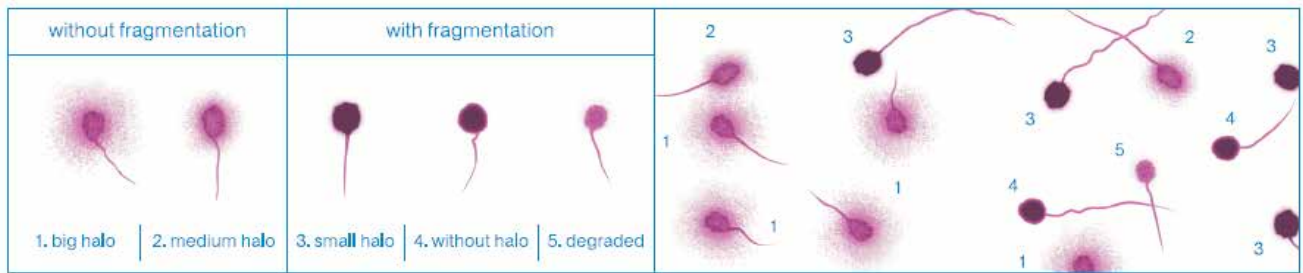
The evaluation of the Sperm DNA Fragmentation is highly recommended before incurring expensive and frustrating IVF processes for the couple.



The DNA of the cells can be damaged through various mechanisms. The integrity of the paternal genome is therefore of paramount importance in the initiation and maintenance of a viable pregnancy both in a natural conception and in assisted reproduction.

The patented Sperm Chromatin Dispersion technique (SCD test) is based on the principle that sperm with fragmented DNA fails to produce the characteristic halo of dispersed DNA loops that is observed in sperm with non-fragmented DNA, following acid denaturation and removal of nuclear proteins.

With the SCD protocol from the range of **Halosperm**[®] kits, highly contrasted halo images can be accurately assessed using conventional bright-field microscopy after Wright staining. Sperm tails are preserved, making it possible to unequivocally discriminate sperm from other cell types and also to identify degraded sperm cells beside the one with big, medium or no halo.



Easy Steps

An initial acid treatment denatures DNA molecules in those sperm cells with fragmented DNA. Following this, the lysis solution removes most of the nuclear proteins, and in the absence of massive DNA breakage produces nucleoids with large halos of spreading DNA loops, emerging from a central core.

Easy Identification

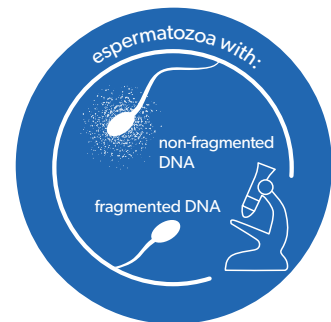
The nucleoids from spermatozoa with fragmented DNA either do not show a dispersion halo or the halo is minimal.



1. Spermatozoa immersion in agarose microgel and spread out on the slide
17 minutes



2. Sample treatment with acid denaturation and lysis solution
32 minutes



3. Dehydration, stain and microscopic visualisation
26 minutes

The method is based on the Sperm Chromatin Dispersion (SCD) test (Fernández et al., J. Androl 24: 59-66, 2003; Fertil Steril 84: 833-842, 2005).

For more related documentation, please contact:
info@halotech.es or visit our website:
www.halotechdna.com/category/library/

Halosperm[®] belongs to the **Halosperm Kits Family**[®]
and **Halotech Solutions**[®]

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