GoldCyto

The Sperm Chromatin Structure Assay (SCSA®) kit

SCSA is a flow cytometric test where sperm DNA breaks can be evaluated indirectly through the DNA denaturability. The assay measures the susceptibility of sperm DNA to acid-induced DNA denaturation in situ, followed by staining with the fluorescent dye acridine orange,By using a flow cytometer.

GolgCyto Biotech

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【**Packing size**】20 Tests/Kit

【**intended use**】For staining detection of sperm nuclear integrity use only

【**Main components**】Reagent A 50ml , Reagent B, Reagent C1 90ml, Reagent C2 13ml.

【**Storage conditions and expiry date**】Store at 4-8℃ for 9 months

【**applicable instrument**】Flowcytometer

【**sample requirements**】Fresh or Frozen semen。

【**Test Method**】

Preparation of reagent before experiment:

1)Prepare reagent C : pipetting reagent C1 78ul to reagent C2 , totally mixing by pipette tips ,(reagent C can store at 4°C for 4 weeks)

Procedure :

1. Ejaculate is allowed to liquefy at 37 °C for 30 min , The liquefied sample adjust by adding on reagent A to approximate concentration,1-2 x 106 cells/ml。
2. Calibrate the flow cytometer and set the flow chamber so that the sperm flow rate reaches 200 / SEC

Flowcytometry measurement

1.Pipetting 100 ul sperm cells (concentration of 1-2 x 106 cells/ml) into the flow cytometer sample tube

2.Pipetting 200ul of reagent B (Keep in cool condition by putting sample tube on ice)

3.After timing exactly 30Sec, Pipetting 600 ul of reagent C solution and mix well

4.Putting the mixed sample into sampling chamber of Flow Cytometer and start to run the analyzing

5.Start 3 min. timing immediately for each sample running (if the flow speed is too fast , the cell flow rate is more than 300 / s, the sample should be diluted with reagent A again).

6.Repeat the steps for next sample testing .

7. Washing the sample pipe after testing.

【**Reference Value**】

Sperm DNA fragment index (DFI) <15% : sperm DNA integrity is normal

Sperm DNA fragment index (DFI) >15% < 30% sperm DNA integrity is general

Sperm DNA fragment index (DFI) >30% sperm DNA integrity is poor