

**ANDROLOGY QUALITY COUNTS™ AQC™ Products SPERM VIABILITY STAIN**  
**Catalog #SA200**

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**INTENDED USE For Education and Research Use Only**

AQCTM Sperm Viability Stain is intended for use to determine viability of sperm samples.

**PRODUCT DESCRIPTION**

Materials contain a 5% solution of Eosin-Y and a 10% solution of Nigrosin.

**Warnings and Precautions**

Materials are for in vitro use only.

Wear appropriate laboratory protective safety equipment while handling.

Users should keep the Material Safety Data Sheet on file.

**Storage and Stability**

Materials should be stored at room temperature.

**MATERIALS NEEDED**

AQCTM Sperm Viability Stain (5% solution of Eosin-Y and 10% solution of Nigrosin)

Personal protective devices such as lab coat and gloves.

Microscope with 100X oil objective and tally device.

Disposable pipettes.

Sample cups or Parafilm® squares.

Glass slides & Coverslips (22 x 40mm).

Permanent coverslip mounting medium.

AQC™ Sperm Viability Smears (Fertility Solutions Inc. Cat.# AQC107)

**Procedure**

Place 1 drop of well mixed, completely liquefied semen into sample cup or onto Parafilm® squares.

Add 2 drops of Eosin-Y. Mix well.

Add 3 drops of Nigrosin. Mix well.

Place a small drop, approximately 5-10uL of mixture immediately onto the slides and make two push smears of the sample.

(Do not make feathered edge smears.)

Allow slides to air dry. If slides will be stored, they should be coverslipped with a permanent mounting medium to maintain their integrity. Do not expose to condensation or the aqueous eosin will elute onto the smear, making viable sperm look pink.

Observe slides under 100X oil objective. Sperm that are viable (alive) exclude the stain and appear white. Non-viable sperm (dead) take up the stain and appear dark pink. Count 200 sperm (100 on each slide) grading as viable or non-viable.

The following calculation is used to obtain the percent viability:

$$\frac{\text{Viable Sperm}}{\text{Viable sperm} + \text{Non-viable sperm}} \times 100 = \% \text{ Viability}$$

Before reporting results, run 2 levels of quality control using AQC™ Sperm Viability Smears.

**REFERENCES**

Kinzer DK and Rothmann SA. The Andrology Trainer™. Fertility Solutions Inc., 1998. (Product #AT100)

Laboratory Quality Management (GS Cembrowski and RN Carey, eds.), ASCP Press, 1989.

WHO Laboratory Manual for the Examination of Human Semen and Sperm-Cervical Mucus Interaction, Cambridge University Press, 1992, 1999.