

Sperm VITAL

Kit to assess sperm vitality



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A. USAGE:

- To assess sperm vitality by dye exclusion in sperm samples with less than about **40 %** progressive motile spermatozoa using bright field microscopy.

B. CONTENTS:

1. Sperm VITAL solution
2. Product insert.

C. PRECAUTIONS:

1. All patient samples should be considered potentially infectious and the user must wear protective gloves, eye protection, face mask and laboratory coats when performing the test and take off contaminated parts immediately.
2. After contact with skin wash immediately with water and soap.
3. The test should be discarded properly after use (**biohazard**).
4. Do not use after expiration date, which appears on the package label.

D. WARNINGS:

1. Care should be taken to avoid contact with skin or eyes, and to prevent inhalation or swallowing.
2. Work under air removal environment.
3. Do not release the products used into the environment.

E. STORAGE:

- The kit keeps dry at **2 – 8 °C**.

F. PREPARATION:

- The kit reagent is ready to use.

G. PROCEDURES:

1. Incubate the Sperm VITAL solution at room temperature for **30 minutes** at least before using.
2. Assess semen sample, preferably within **1 hour** after ejaculation.
3. If the semen samples with less than about **40 %** progressive motile spermatozoa you should make vitality test.
4. Mix **5 µl** of semen with **5 µl** of Sperm VITAL solution, using the edge of the cover slip.
5. Place the cover slip on top of the mixture, avoid air bubbles.
6. Read immediately under the microscope with magnification **400 X**.
7. Scan the complete microscopic slide and count between **100** and **200** sperms.
8. Differentiate the living from the dead spermatozoa.
9. Read results immediately, waiting too long will yield lower vitality percentages.

H. CALCULATIONS:

$$\text{Vitality (\%)} = \text{Vital sperm} / (\text{Vital sperm} + \text{Non vital sperm}) \times 100$$

- **Normal reference** = If vitality equal **58 %** or **more** of the spermatozoa are live.
- **Spermatozoa not stained** = Live spermatozoa (**Vital sperm**).
- **Spermatozoa stained red** = Dead spermatozoa (**Non vital sperm**).

NOTE:

High percentage of vitality and high percentage of immotile spermatozoa may indicate structural defects in the flagellum.

Low percentage of vitality and high percentage of immotile spermatozoa (Necrozoospermia) may indicate epididymal pathology.

