



Eosin & Nigrosin

Separate Stain Solutions for Sperm Vitality Testing

Principle

Viable spermatozoa (with intact membranes) will remain unstained. Non-viable spermatozoa (with damaged membranes) will be stained with Eosin Y(G) Stain Solution. The high concentrated Nigrosin Stain Solution provides a dark background for easier recognition of both.

Reagents

Eosin & Nigrosin stain solutions for sperm vitality testing are ready for use solutions in practicable dropping bottles.

If stored at the recommended storage temperature, the reagents are stable until the expiry date printed on the label. After opening, contamination-free solutions are stable for at least 3 months. Always keep bottles properly closed.

At storage temperatures below 15 °C, dye precipitates may form. These can be dissolved by heating the solution up to <50 °C for maximum 15 minutes (with periodical mixing) in a water bath.

Risks and Safety

Please observe the necessary precautions for use of laboratory reagents and body fluids. Applications should be performed by expert personnel only. Follow the national and laboratory internal guidelines for work safety and infection control. Wear suitable protective clothing and disposable gloves while handling.

It is important to ensure effective protection against infection according to laboratory guidelines.



www.sds-id.com

For additional and general safety information please see details on the label and the corresponding Safety Data Sheet (SDS).

Download by QR code or link:

www.sds-id.com/100064-8

Contents/Main Components

003861-... Cont. 0.5% Eosin Y, 290 mosm/kg NaCl.

003862-... Cont. 10% Nigrosin, 290 mosm/kg NaCl.

003860-6001 SET Eosin & Nigrosin

003861-0030 R I 1x 30 ml Eosin Stain Solution in practical dropping bottle.

003862-0030 R II 1x 30 ml Nigrosin Background Solution in practical dropping bottle.

Other formulations available on request.

The kit is suitable for dyeing up to about 300 to 350 preparations.

In addition required / recommended

Laboratory microscope, slides, mounting medium.

Procedure

Before testing pre-label microscopic slide with the appropriate patient identifier. Then follow the steps below:

- Assess sperm vitality as soon as possible after liquefaction of the semen sample; approximately 30 minutes after collection.
- Mix fresh sample with thorough swirling before pipetting aliquots for staining and evaluation.
- Aliquote 30 ... 50 µL Sample in a small reagent tube.
- Add 2 ... 3 drops of Eosin Stain Solution. Close tube. Gently swirl to mix. Wait for 30 seconds.
- Add 2 ... 3 drops of Nigrosin Background Solution. Close tube. Gently swirl to mix.
- Place immediately one drop of the mixture on a pre-labeled microscopic slide.
- Prepare a smear with focus to an uniform cell distribution.
- Allow the smears to dry on air.
- Coverslip dried slides with a compatible mounting medium.
- Examine with 400x or 1000x magnification (40x or 100x objective). For 1000x magnification use immersion oil.

Notes

Avoid any possibility of sample contamination. Observe the applicable safety precautions.

Results

Assessment

Viable sperm:	Colorless or faint pink heads
Non-viable sperm:	Red or dark pink heads
Background:	Dark

Notes

This product information exclusively relates to the product described in this leaflet. In particular, this product information cannot be applied to similar reagents from other manufacturers.

Periodically check for updates of this product information on our website.

Classifications

Not for human diagnostics.

Instruction for Use

For professional use only.

To avoid errors, the use of qualified personnel is carried out. National guidelines for work safety and quality assurance must be followed.

The used equipment must comply with the state of technology and the laboratory requirements.

All samples and used tubes/vials must be marked clearly identifiable to exclude any confusion.

Protection against infection

It is important to ensure effective protection against infection according to laboratory guidelines.

Laboratory personnel working with human samples should at a minimum be immunized against Hepatitis B (HBV).

Support / Information service

For methodological and technical support, please contact us by E-Mail at support@bioanalytic.de.

Periodically check for updates of this product information on our website.

Feedback

Information from users can be reported to support@bioanalytic.de.

Suggestions for further developments will be considered.

Waste Management

Please observe your national laws and regulations.

Used and expired solutions must be disposed of in accordance with your local regulations.

Inside the EU, national regulations apply that are based on the current, amended version of Council Directive 67/548/EEG on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances.

Decontaminated packaging can be disposed of as household waste or recycled, unless otherwise specified.

Unused Remains

These are usually hazardous wastes that must be recycled or disposed of. After consultation we take back such residual materials in the original container.

Literature & Footnotes

Legends for the graphic symbols and tags used follow relevant norms or are available on our internet pages.

- [1] Bjorndahl, L., I. Soderlund, and U. Kvist. "Evaluation of the One-Step Eosin-Nigrosin Staining Technique for Human Sperm Vitality Assessment." *Human Reproduction* 18.4 (2003): 813-816.
- [2] Carrell, Douglas T., and Kenneth I. Aston. *Spermatogenesis Methods and Protocols, Methods in Molecular Biology*. Vol. 927. New York: Humana Press, 2013. 13-19.
- [3] Shambayati, Behdad. *Cytopathology*. Oxford: Oxford University Press, 2011. 332-333.
- [4] WHO Laboratory Manual for the Examination and Processing of Human Semen. 5th ed. Geneva: World Health Organization, 2010. 26-32.