

# Specification

Item number: 0069

**ROTITEST®Vital**

**ROTITEST® BioAnalysis Grade, sterile, ready-to-use**

CAS No.:

print date:

19.02.2024

formula:

density: 1,37

storage temperature: +4 °C

molecular weight:

## Type analysis

<b>Appearance (test solution)</b>	red
<b>Turbidity</b>	transparent
<b>Absorption</b>	complies

For non-radioactive quantitation of proliferating cells and for cytotoxicity assays. Sterile WST-8 solution [2-(2-methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-(2,4-disulfophenyl)-2H-tetrazolium, monosodium salt] Dojindo, Patent No. WO97/38985 Mechanism: Dehydrogenization of the highly water-soluble tetrazolium salt WST-8 by living cells results in a water-soluble orange formazan dye which is released into the surrounding medium. Measurement: Photometrically at 450 nm (430 up to 490 nm). Validation: Results are of highly stringent correlation with [3H]-thymidine incorporation assays (Tominaga M. et al. (1999) Anal. Commun. 36:47-50). Application parameters: Culture media with or without phenol red. 5 ml is sufficient for enumeration of 500 cell samples. 10 µl Rotitest® Vital per 96well with 100 µl cell suspension/ culture medium. Optimum cell number: 5x10<sup>3</sup> cells per 96well. For analysis of leukocyte derived cells use 105 cells/96well. Minimum cell number: 1.000 cells/96well (leukocytes 2.500 cells/96well). Maximum cell number: 25.000 cells/96well Calculation factors for bigger well plates: 48well - factor 3.1 / 24well - factor 6 / 12well - factor 12 / 6well - factor 30. Subsequent sterilization possible by membrane filtration. Compatibility: Compatible with other reagents for cell proliferation assays such as neutral red or crystal violet. Presence of chemicals affecting dehydrogenase activity as well as of reducing agents may cause artefact results. Storage: For frequent use, store at +4 °C protected from light. For long-term storage with infrequent use, store at -20°C. Avoid repeated thawing and freezing.

Our products are tested for laboratory use only.

The stated information refers to the current status of product quality.

We reserve the right to implement necessary changes.

**Dr. R. Niemand**

Head of Quality Assurance

**S. Lorsee**

Head of Quality Management

*This document is computer printout and has therefore not been signed by hand.*

**Carl Roth GmbH + Co. KG**  
Schoemperlenstraße 3-5  
76185 Karlsruhe

Telefon 0721/5606-0  
Telefax 0721/5606-149  
E-Mail: info@carlroth.de

Die Firma ist eine Kommanditgesellschaft mit Sitz in Karlsruhe, Reg. Gericht Mannheim HRA 100055. Persönlich haftende Gesellschafterin ist die Firma Roth Chemie GmbH mit Sitz in Karlsruhe, Reg. Gericht Mannheim HRB 100428. Geschäftsführer: André Houdelet

