ABTS Tablets
Cat. No. 11 112 422 001 50 mg

ABTS Buffer
Cat. No. 11 112 597 001 16.7 g (for 1 l)

Composition
Each ABTS tablet contains 50 mg ABTS Substrate and 60 mg vehicle substances.
The ABTS Substrate buffer consists of sodium perborate, citric acid, and disodium hydrogen phosphate.

Storage and stability
ABTS tablets are stable when stored dry and protected from light at +2 to +8°C until the expiration date printed on the label.
The ABTS Substrate buffer is stable at +2 to +8°C (until the expiration date printed on the label) if contamination by microorganisms is strictly avoided. The solution of ABTS Substrate in this buffer is stable for 3 months at +2 to +8°C when stored protected from light.

Preparation of solutions
Dissolve the contents of one bottle of ABTS Substrate buffer in 100 ml double dist. water. This concentrate is stable when stored in aliquots at −15 to −26°C. In order to obtain the working solution, dilute one aliquot in a ratio of 1:10 with double dist. water. Dissolve one ABTS tablet (50 mg) in 50 ml of the working solution. This solution has a light-green color. In microplates it appears to be colorless. A405 nm/1 cm should be <0.16. Heavy metal ions or traces of peroxidase will convert the color of the ABTS Substrate solution into dark green. If the color of the solution has changed from light-green to dark green, the ABTS Substrate solution should not be used for the assay.

Application
The ABTS Substrate solution is the ideal substrate solution for enzyme immunoassays with horse radish peroxidase as marker enzyme.

ELISA Assay
After the addition of the immunoreagent and washing steps, follow the procedure described in the table below:

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
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<tbody>
<tr>
<td>1</td>
<td>Remove washing solution carefully.</td>
</tr>
<tr>
<td>2</td>
<td>Pipette to each well 100 µl - 200 µl ABTS Substrate solution. <strong>Note:</strong> Prewarm solution to +15 to +25°C.</td>
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<tr>
<td>3</td>
<td>For maximum sensitivity, incubate for 1 h at +22 to +37°C on a plate shaker at 250 rpm until the color development is sufficient for a photometric analysis (or shake at 500 rpm for 30 min). Extended incubation periods should be avoided, since after approx. 1 h the color intensity of the dye tends to decrease slightly instead of further increasing.</td>
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<td>4</td>
<td>Measure at 405 nm against ABTS Substrate solution as a blank (reference wavelength approx. 492 nm). <strong>Note:</strong> The green color of the ABTS Substrate can be easily detected by eye, for numeric values however a photometric measurement is required.</td>
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</tbody>
</table>

Changes to previous version
Editorial changes

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