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ABTS tablets

Cat. No. 11 204 521 001 5 mg

Version 15

Content version: July 2016

Buffer for ABTS

Cat. No. 11 204 530 001 125 ml (1× solution)

Store at +2 to +8°C

Composition

Each ABTS tablet contains 5 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 one ABTS tablet (5 mg) in 5 ml of ABTS Substrate buffer. This solution has a light-green color In microtiter plates it appears to be colorless $A_{405\ nm}$/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. Because of the high sensitivity of the reaction, autoreaders will often display “over” after some minutes.

ELISA Assay

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

Step	Action
1	Remove washing solution carefully.
2	Pipette to each well 100 µl - 200 µ ABTS Substrate solution. ***Note***: Prewarm solution to +15 to +25°C.
3	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.
4	Measure at 405 nm against ABTS Substrate solution as a blank (reference wavelength approx. 492 nm). ***Note***: The green color of the ABTS Substrate can be easily detected by eye, for numeric values however a photometric measurement is required.

Changes to previous version

Editorial changes

Trademarks

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