

Substrate Tablets

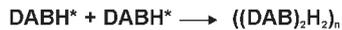
DAB TABLETS, 10 mg, pH 7.0, fizzing, buffer-containing

Cat. No. 4170

INTRODUCTION

These DAB-tablets (3, 3-diaminobenzidine tetrahydrochloride) are applied as chromogen substrate tablets for horse radish peroxidase catalyzed staining procedures, **especially in immunohistochemistry**. DAB produces a brown colour during the enzymatic degradation of H_2O_2 by horse radish peroxidase.

To EASE the use the tablets also contain a phosphate buffer giving you the proper pH (7.0 ± 0.1) when dissolved in water.



$((DAB)_2H_2)_n$ = coloured product of oxidation

The tablet contains 10 mg of DAB and dissolves in distilled water in approx. 5 minutes.

Please avoid that the tablets get in contact with metal or metal ions (e.g. metal forceps) as metal acts as a catalyst of the oxidation process.

REAGENTS

As the substrate buffer is included in the tablets, the only other reagent is dilute and hydrogen peroxide.

THE WORKING PROCEDURE IS VERY SIMPLE

1. The tablet container is removed from the refrigerator and allowed to stand at room temperature for about 15 minutes.
2. 1 tablet is dissolved in 10 ml of dist. H_2O at room temperature. This gives you a solution of pH 7.0 ± 0.1 in a concentration of 1mg/ml DAB buffered with 20 mM phosphate. Do **NOT** use metal forceps during handling of the tablets!
3. Some fine particulate matter will remain in the suspension even after the solution is thoroughly mixed. This will not effect the result, however if preferred the solution can be filtered using Whatman No. 2 paper.
4. 2 ml of the 1 mg/ml DAB-solution is added 20 μ l 3% hydrogen peroxide (H_2O_2) and mixed.
5. The solution with the content of H_2O_2 is stable at least 2 hours at room temperature. The solution without H_2O_2 is stable at least 24 hours at 2-8°C.

STORAGE

Short term storage: At 2-8°C.

Long term storage: At -20°C.

Keep the lid tightly closed during storage of the tablets and do not remove the drying capsule from the container.

PRECAUTIONS AND DISPOSAL

Take precautions and handle disposal of waste according to local, state and federal regulations.