



3,3'-Diaminobenzidine Tetrahydrochloride (DAB) Substrate Kit

Prod. No.: D100
Lot No.:
Pkg. Size: 300ml 900 ml Working Solution
Storage: Store the DAB Stock Solution below 0° C.
The remaining reagents are stored at 2-8° C.

Description

The Kit contains the following reagents to make an active stable substrate solution for use with the enzyme horseradish peroxidase:

1. 12 ml Stable DAB Solution (Store below 0°C)
2. 6 ml Peroxide Solution (Store 2-8°C)
3. 6 ml Buffer Stock Solution (Store 2-8°C)

3,3'-Diaminobenzidine (DAB) is the most commonly used substrate for demonstrating the presence of horseradish peroxidase in immunohistochemistry or immunoblotting. It produces a stable water/alcohol insoluble reddish brown product. The stable (25X) concentrate supplied is sufficient for making 300 ml working solution.

Appearance

The (25X) DAB concentrate is an amber solution and the working solution is a light pink clear solution. All other solutions are clear.

Working Dilution

1. To 5ml distilled water add 100µl (2 drops) of buffer stock solution.
2. Add 200µl (4 drops) of DAB stock solution.
3. Add 100µl (2 drops) of Hydrogen Peroxide solution. Mix well.
(Working solution stable for at least 6 hours at room temperature.)

Application

For use as an insoluble substrate for horseradish peroxidase. This substrate solution is suitable for use in immunoblotting and immunohistological staining procedures.

Storage and Stability

Store the DAB (25X) stock solution below 0°C. The remaining reagents are stored at 2-8 ° C.

References

1. Nakane, P.K. and Pierce, G.B. (1967) *J. Histochem. Cytochem.* **14**, 929
2. Barile, F. and Trombetta, L.D., (1982) *J Histochem.* **5**:12
3. Rose, N.R., Friedman, H. and Fahey, J.L., eds. (1986) *Manual of Clinical Laboratory Immunology*, 2rd. ed. ASM, Washington, D.C.
4. Hsu, S. and Soban, E. (1982) *J. Histochem. Cytochem.* **30**:1079

Caution:

DAB is a possible carcinogen. Avoid contact by using gloves and mask when handling.