



AEC
Peroxidase Substrate
Cat. No. SK-4200

Store at 2-8 °C

Burlingame, CA USA

AEC Substrate Kit

Vector® AEC Substrate (3-amino-9-ethylcarbazole) produces a red reaction product in the presence of peroxidase (HRP) enzyme.

Vector® AEC Substrate can be used on tissue sections or cells, or on membranes such as nitrocellulose, PVDF, or nylon.

The **Vector® AEC Substrate Kit** contains all of the reagents necessary to prepare the substrate working solution. These reagents are supplied in convenient dropper bottles.

REAGENTS:

6 ml Buffer Stock Solution

6 ml AEC Stock Solution

6 ml Hydrogen Peroxide Solution

STORAGE:

- Store reagents in original bottles at 2-8 °C.
- Avoid storing reagents or working solution in strong direct light.

PREPARATION OF SUBSTRATE WORKING SOLUTION:

- To 5.0 ml of distilled water
 - Add 2 drops (approximately 72 μl^\dagger) of Buffer Stock Solution
 - Add 3 drops (approximately 90 μl^\dagger) of AEC Stock Solution
 - Add 2 drops (approximately 80 μl^\dagger) of the Hydrogen Peroxide Solution

- Mix well before use

\dagger Drop volumes differ due to solvent compositions.

INSTRUCTIONS FOR USE:

For Tissues or Cells

After incubation with a peroxidase (HRP) detection system, rinse well. Incubate with the substrate working solution at room temperature for 10-30 minutes. Optimal development times should be determined by the investigator.

Wash for 5 minutes in water.

Counterstain, if desired, with Vector® Hematoxylin (H-3401) or Vector® Hematoxylin QS (H-3404). (See counterstain compatibility chart on reverse side.) Coverslip with an aqueous-based mounting medium such as **VectaMount™ AQ** (H-5501).

AEC reaction product is soluble in alcohols and other solvents.

For Blots

Development time is generally 10-20 minutes at room temperature. When development is satisfactory, rinse membrane in water and air dry.

NOTES:

We recommend using glass-distilled water in the preparation of the substrate buffer. Deionized water may contain inhibitors of the peroxidase reaction.

IMPORTANT: Little is known about the toxicity and carcinogenicity of the substrate kit components. Appropriate care should be exercised when using this reagent including gloves, eye protection, lab coats, and good laboratory procedures. Dispose in accordance with local regulations.

For Laboratory Use