



## **AEC Peroxidase Substrate Kit**

**Cat. No. 43825**

*For Research Use Only*

### **DESCRIPTION**

The ENZO **AEC Peroxidase Substrate Kit** contains reagents for visualization of peroxidase reactions using Aminoethylcarbazole (AEC). In the presence of H<sub>2</sub>O<sub>2</sub>, peroxidases catalyze the oxidation of AEC into a brick red precipitate. The supplied reagents are sufficient for preparation of 300 ml of ready-to-use color reaction mixture.

### **REAGENTS**

**Aminoethylcarbazole**, 6 ml  
20 mg/ml in dimethylformamide

**8X Reaction Buffer/Substrate Reagent**, 40 ml  
Hydrogen peroxide in acetate buffer with stabilizers and enhancers

**Mixing Bottle**, 1  
15 ml bottle for preparation of color reaction mixture

### **STORAGE AND SHELF LIFE**

1. Upon receipt, remove the **Aminoethylcarbazole** and store at -20°C. Store the **8X Reaction Buffer/Substrate Reagent** at 2-8°C.
2. The reagents are stable until the expiration date indicated on the label when used and stored as directed.

### **WARNINGS**

- **For RESEARCH use only.**
- Aminoethylcarbazole is a potential carcinogen dissolved in dimethylformamide, a hazardous solvent. Avoid inhalation, ingestion and contact with skin. Wash thoroughly with soap and water if contact is made. Dispose of this solution in accordance with local regulations.

### **PREPARATION OF COLOR REACTION MIXTURE**

1. Prepare 1X Reaction Buffer/Substrate Reagent by adding 1 ml of 8X Reaction Buffer/Substrate Reagent to the empty mixing bottle and diluting it with 7 ml of deionized or distilled water. Mix well.
2. Prepare Color Reaction Mixture by first mixing the concentrated Aminoethylcarbazole and then adding 4 drops to 8 ml of 1X Reaction Buffer/Substrate Reagent. Mix well. When stored at 2-8°C, the Color Reaction Mixture is stable for up to one week.

### **APPLICATION**

1. For staining of cells and tissues, use 300-500 µl (6-8 drops) of Color Reaction Mixture per specimen. For mounting, use an aqueous mounting reagent.
2. For staining of membranes, use 10-30 ml of Color Reaction Mixture for a 10 cm X 10 cm filter.

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