

## AEC Chromogen/Substrate Kit

### Liquid Format

<b>Catalog No.:</b>	K 003
<b>Intended Use:</b>	To use as substrate/chromogen in conjunction with peroxidase based immunostaining systems.
<b>Introduction:</b>	Even though DAB is much more sensitive chromogen compared to amino ethyl carbazol (AEC) because of its carcinogenic nature, some labs avoid using DAB. To resolve this problem, we have designed an AEC chromogen in liquid format. AEC is a chromogen of choice when performing immunoperoxidase staining. It has been well accepted amongst the pathologist because of its relatively less toxic nature compared to DAB. It produces a red colored end product at the positive sites which gives a good contrast with blue hematoxylin counter stain. Specimens stained in AEC can not be dehydrated in ethanol and hence should be mounted in aqueous based mounting medium such as C/C Mount (DBS catalog # K002).
<b>Principle:</b>	Peroxidase reacts with 3% Hydrogen Peroxide Substrate to degrade it, which in turn reacts with AEC to precipitate it at the positive sites giving red brown colored end product
<b>Components:</b>	<ul style="list-style-type: none"><li>i) 3mL concentrated AEC Buffer.</li><li>i) 3mL concentrated AEC Chromogen.</li><li>ii) 3mL of 3% Hydrogen Peroxide Substrate.</li></ul>
<b>Storage of Kit:</b>	Store at 2 - 8°C. Do not use beyond the expiration date stated on the label.
<b>Working Solution:</b>	<p>Note: The working chromogen solution is stable for 6 hours. Any solution not used after this period should be discarded.</p> <ul style="list-style-type: none"><li>i) Take 5 ml of distilled or de-ionized water in a test tube.</li><li>ii) Add two drops of concentrated buffer and mix.</li><li>iii) Add two drops of concentrated AEC chromogen and mix.</li><li>iii) Add two drops of 3% H<sub>2</sub> O<sub>2</sub> substrate solution and mix.</li></ul>
<b>Procedure:</b>	<ul style="list-style-type: none"><li>i) Once tissue sections have been incubated with peroxidase, wash them with buffer thoroughly.</li><li>ii) Wipe the glass to remove excess of buffer and add enough drops of the working AEC solution to cover the tissue sections.</li><li>iii) Incubate for 10-20 minutes at room temperature. For the best results, look under the microscope for the signal development. Once desired signal to noise ratio is achieved, stop the reaction by washing slides in wash buffer.</li></ul>
<b>Precautions:</b>	AEC can cause skin irritation upon contact. Avoid contact with clothes and exposed skin. If accidentally contacted, flush with tap water immediately. Follow instructions provided by your local authorities for disposal.

#### IVD: For In Vitro Diagnostic Use

DBS will not be held responsible for patent infringement or other violation that may occur with the use of our product

**DBS**

1020 Serpentine Lane, # 114, Pleasanton, CA 94566 Tel: 925 484 3350, Fax: 925 484 3390

Website: [www.dbiosys.com](http://www.dbiosys.com) e-mail: [customersupport@dbiosys.com](mailto:customersupport@dbiosys.com)