

# Zeta Universal AP Polymer Detection Kit

**Storage:** Store vial at 4 °C. When stored at 2-8 °C, this kit remains stable for 24 months.

**Comment:** A primary antibody specific to an antigen on a formalin-fixed paraffin-embedded (FFPE) tissue section is detected by the Zeta Universal AP Polymer Detection Kit. The antigen sites are then visualized with AP-Red chromogen/substrate. The reagent is ready-to-use in a convenient dropper bottle. The Zeta Universal AP Polymer Detection Kit is a one-step system that uses a direct method, resulting in a polymer-secondary antibodies-AP complex that universally detects primary mouse and rabbit antibodies. The resulting chromogenic reaction can be visualized by AP Red chromogen using light microscopy.

Zeta Corporation offers polymer-based detection to reduce non-specific staining and enhance the signal-to-noise ratio of immunohistochemistry applications (IHC). Many human organs contain endogenous biotin, which may interfere with actual staining for IHC and require additional blocking steps. With the advent of polymer detection technology, biotin was removed entirely from the detection chemistry, thereby reducing the “background” noise. However, the size of the polymer molecule also introduces steric hindrance.

Therefore, Zeta ensured that our detection polymers are small in size to avoid steric hindrance, thereby increasing the sensitivity and specificity of the detection process.

**Intended Use:** The Zeta Universal AP Polymer Detection Kit is intended for use in immunohistochemistry (IHC) staining protocols. This reagent is designed to detect target antigens in formalin-fixed, paraffin-embedded (FFPE) tissue sections when used in conjunction with antibodies and AP RED chromogen in the immunohistochemical (IHC) staining process.

## Recommended Protocol:

1. Cut 4- $\mu$ m tissue sections and dry them thoroughly.
2. Deparaffinize and rehydrate tissue sections.
3. Apply primary antibody according to the recommended protocol; rinse with IHC wash buffer.
4. Apply the Universal AP Polymer Detection Kit for 30 minutes at room temperature; rinse with IHC wash buffer.
5. Apply AP red chromogen with the desired incubation time, rinse with distilled or deionized water.
6. Apply Enhancer as needed.
7. Counterstain and coverslip.

**Supplied As:** Reagents are in Tris-HCl buffer containing stabilizing protein and <0.1% ProClin

**REF** ZD12-R Zeta Universal AP Polymer Detection Kit (without AP RED Chromogen)  
Anti-mouse AP/anti-rabbit AP (ready-to-use) (25 ml)