**PowerVision™ Poly-AP IHC Reagents**
**(Biotin-free, anti-Mouse or Rabbit Primary Antibodies)**

| Cat. No. | Alternative Cat. No. | For No. of Slides | Poly-AP anti-Mouse IgG and/or anti-Rabbit IgG |
|---|---|---|---|
| PV6110 | DPVM-110AP | 1100 | Poly-AP anti-Mouse IgG (110 mL, RTU) |
| PV6133 | DPVR-110AP | 1100 | Poly-AP anti-Rabbit IgG (110 mL, RTU) |

## I. INTENDED USE

For Research Use Only.
PowerVision Poly-AP IHC Reagents are intended for the chromogenic detection of targeted antigens that have been reacted to a user-supplied primary antibody.

## II. INTRODUCTION

PowerVision and PowerVision+ IHC Reagents utilize a novel poly-labeling technology, wherein secondary antibodies are directly polymerized with HRP or AP into compact polymers bearing higher ratio of enzymes to antibodies. These polymers demonstrated drastically improved detection sensitivity, efficiency and reliability compared to conventional secondary antibody conjugates. Direct polymerization also avoids an endogenous biotin reaction.

## III. REAGENTS AND MATERIALS SUPPLIED

**Poly-AP anti-Mouse IgG or Rabbit IgG**
**Ready-to-use, Poly-AP labeled anti-Mouse IgG or anti-Rabbit IgG polymer**

## IV. HANDLING, STORAGE AND SHELF LIFE

**Storage Conditions:**
All reagents are to be stored at 2-8°C. Void after expiration date as specified on reagent label**.**
**Precautions:**
Specimens before and after fixation, and all materials exposed to them, should be handled as if capable of transmitting infection and disposed of with proper precautions. The user is advised to consult the MSDS for further

## V. REAGENTS AND MATERIALS NEEDED BUT NOT SUPPLIED

- **Universal IHC Blocking/Diluent**
- **Substrates/Chromogens**
- **Primary antibodies**

## VI. STAINING PROCEDURE

**Each staining run should include both positive and negative tissue control slides to confirm**
**1.** That the staining system is working properly
2. That positive and negative staining is specific
3. That the correct procedure has been followed.

**The combination of antigen retrieval protocol, primary antibody dilution, for use with a detection system should be determined by the user on a series of known positive and negative controls.**

**The tissue sections should not be allowed to dry out at any point during the staining procedures.**
**All procedures are performed at room temperature (18-26 °C).**

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1) Block with Universal IHC Blocking/Diluent (PV6123) for 10 min. Blot gently, no need to wash. Note: This step can be omitted if primary antibodies are diluted in the Universal IHC Blocking/Diluent
2) Apply primary antibodies for 30-60 min. Rinse well with buffer and wash in buffer for 5 min, twice
3) Apply Poly-AP anti-Mouse or anti-Rabbit IgG and incubate for 30 min. Rinse well with buffer and soak in buffer for 5 min., twice.
4) Apply AP substrate/chromogen and incubate for 30 min. Rinse well with deionized or tap water. Note: suitable substrates include Fast Red/ Naphthol Phosphate Reagent
5) Counterstain and Mount: Proceed with appropriate counterstaining and mounting protocol.

**VII. LIMITATIONS**

Correct treatment of tissues prior to fixation and embedding is important for obtaining optimal results. Inconsistent results may be due to variation in fixation, embedding, pre-treatment and primary antibody reactivities, as well as from inherent variations in tissue. Leica Biosystems warrants that the materials sold meet our performance specifications until the expiration, if stored as recommended. No other warranties or guarantees, expressed or implied, are provided, including warranties for merchantability or fitness for a particular purpose.

**VIII. GENERAL REFERENCE**


**1**) S.R. Shi, J. Guo, R. Cote, L. Young, D. Hawes, Y. Shi, S. Thu and C. Taylor, “Sensitivity and Detection Efficien cy of a Novel Biotin-free IHC Detection System: PowerVision”, Applied Immunohistochemistry & Molecular Morphology, 7:201-208, 1999
2) K. Petrosyan, R. Tamayo, D. Joseph, “Sensitivity of a Novel Biotin-free Detection Reagent (PowerVision+) for IHC” J. Histotechnology, 25:247-250, 2002
3) G. Bricca, et al., “Immunostaining Melanoma Frozen Sections: The 1-Hour Protocol” Dermatologic. Surgery, 30:403-408, 2004



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