

Please note this data sheet has been changed effective October 24, 2014

# UltraVision LP Large Volume Detection System HRP Polymer (Ready-To-Use)

# INTENDED USE

For In Vitro Diagnostic Use

<u>AVAILABILITY:</u>	Catalog #	<u>Slide Volume</u>	
	TL-060-HL	300-600 slides	
	TL-125-HL	625-1250 slides	
SPECIFICITY:	Anti-Mouse IgG (H+L), Anti-Rabbit IgG (H+L)		
ENZYME:	Peroxidase		
CHROMOGEN/SUBSTRATE:	None provided	l	

## **REAGENTS**

Qty.	Component	TL-060-HL	TL-125-HL
1	<mark>UltraVision Protein Block</mark>	<mark>TA-060-PBQ</mark>	<mark>TA-125-PBQ</mark>
1	Primary Antibody Enhancer	TL-060-PB	TL-125-PB
1	HRP Polymer	TL-060-PH	TL-125-PH

(The three-digit number in the middle of each Catalog # designates the reagent volume in mL or number of tablets.)

## DESCRIPTION

UltraVision LP is the latest technology in polymeric labeling. Polymer detection methods have been shown to provide increased sensitivity and detection simplicity. This second-generation polymer system is composed of smaller polymer subunits that minimize conflicts in binding the target protein. Decreased binding conflicts result in more consistent staining and better signal amplification.<sup>1</sup> Ultimately, this gives the user higher sensitivity and antibody efficiency.<sup>2</sup> With UltraVision LP, you use less antibody and obtain better signal-to-noise ratios. UltraVision LP is also biotin-free, which eliminates background staining found with traditional biotin-based detection methods.

## PRINCIPLE OF THE PROCEDURE

This UltraVision detection system detects a specific mouse IgG or rabbit IgG antibody bound to an antigen in tissue sections. The specific antibody is located by a universal secondary antibody formulation conjugated to an enzyme-labeled polymer that recognizes mouse and rabbit immunoglobulins. The polymer complex is then visualized with an appropriate substrate/chromogen.

## WARNINGS & PRECAUTIONS

Refer to MSDS.

## **STORAGE & SHELF LIFE**

Store at 2-8°C. Each component is stable for 18 months.

#### **MICROBIOLOGICAL STATE**

Product(s) not sterile.

## MATERIALS REQUIRED BUT NOT PROVIDED

Primary antibody. Diluent.



Lab Vision Corporation 46500 Kato Road Fremont, CA 94538-7310, USA US Toll Free: 1 (800) 522-7270 Phone: +1 (269) 544-5600 Fax: +1 (269) 372-2674 www.thermoscientific.com/labvision



EC REP

Thermo Fisher Scientific Anatomical Pathology Tudor Road, Manor Park Runcorn, Cheshire WA7 1TA, UK Tel: +44 (0) 1928 534 050 Fax: +44 (0) 1928 534 049 sales.ap.uk@thermofisher.com



Please note this data sheet has been changed effective October 24, 2014

## **SPECIMEN & REAGENT PREPARATION**

Refer to Procedure.

## PROCEDURE

## STAINING PROTOCOL (kit components in bold):

- 1. Deparaffinize and rehydrate tissue section.
- 2. Wash 2 times in buffer.
- 3. If required, incubate tissue in digestive enzyme (or appropriate pretreatment).
- 4. Wash 4 times in buffer.
- 5. To reduce nonspecific background staining due to endogenous peroxidase, incubate slide in UltraVision Hydrogen Peroxide Block for 10 minutes.
- 6. Wash 4 times in buffer.
- Apply UltraVision Block and incubate for 5 minutes at room temperature to block nonspecific background staining. NOTE: Do not exceed 10 minutes or there may be a reduction in desired stain. (May be omitted if primary antibodies are diluted in buffers containing 5-10% normal goat serum.)
- 8. Wash (Optional).
- 9. Apply primary antibody and incubate according to manufacturer's recommended protocol.
- 10. Wash 4 times in buffer.
- 11. Apply Primary Antibody Enhancer and incubate for 10 min at room temperature.
- 12. Wash 4 times in buffer.
- 13. Apply **HRP Polymer** and incubate for 15 minutes at room temperature. (**NOTE:** HRP Polymer is light sensitive. Please avoid unnecessary light exposure and store in opaque vial.)
- 14. Wash 4 times in buffer.
- 15. Incubate with peroxidase-compatible chromogen of choice according to manufacturer's recommendations. Modify incubation time to optimize staining in your laboratory.
- 16. Wash 4 times in DI water.
- 17. Counterstain and coverslip using an aqueous mounting media.

The specificity and sensitivity of antigen detection is dependent on the specific primary antibody used.

## **REFERENCES**

- 1. Shan-Rong Shi, James Guo, Richard J. Cote, Lillian Young, Debra Hawes, Yan Shi, Sandra Thu, and Clive R. Taylor, Applied Immunohistochemistry & Molecular Morphology, vol 7, 201-208, 1999.
- 2. Karen Petrosyan, Rosalba Tamayo, and Daisy Joseph, "Sensitivity of a Novel Biotin-free Detection Reagent (PowerVision+) for Immunohistochemistry" J. Histotechnology, vol 25, 247-250, 2002.

## TROUBLESHOOTING

Please contact Thermo Fisher Scientific Technical Support by phone (1-269-544-5600 or 1-800-522-7270) or by email (lab.reagents@thermofisher.com).



Lab Vision Corporation 46500 Kato Road Fremont, CA 94538-7310, USA US Toll Free: 1 (800) 522-7270 Phone: +1 (269) 544-5600 Fax: +1 (269) 372-2674 www.thermoscientific.com/labvision



EC REP

Thermo Fisher Scientific Anatomical Pathology Tudor Road, Manor Park Runcorn, Cheshire WA7 1TA, UK Tel: +44 (0) 1928 534 050 Fax: +44 (0) 1928 534 049 sales.ap.uk@thermofisher.com