

## P504S (P)

Prediluted Polyclonal Antibody

Control Number: 903-200VP-042315

### VP Echelon™ Series

**Catalog Number:** AVA 200 G, G25  
**Description:** 6.0, 25.0 ml, prediluted  
**Dilution:** N/A

#### Intended Use:

Analyte Specific Reagent. Analytical and performance characteristics are not established.

#### Summary & Explanation:

P504S, also known as  $\alpha$ -methylacyl coenzyme A racemase (AMACR), is a peroxisomal and mitochondrial enzyme that plays a role in bile acid synthesis and  $\beta$ -oxidation of branched chain fatty acids (1). P504S was initially identified from a cDNA library as a gene that is overexpressed in human prostate cancer; with little or no expression in normal prostate (2,3). In immunohistochemistry, P504S has been shown to be a specific marker of prostatic adenocarcinoma (2-5). Additionally, prostate glands involved in PIN have been found to express P504S, whereas P504S was nearly undetectable in benign glands (5,6).

**Source:** Rabbit polyclonal

**Clone:** N/A

**Isotype:** IgG

#### Known Applications:

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

#### Supplied As:

Buffer with protein carrier and preservative

#### Storage and Stability:

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user.

#### Analyte Specific Reagent Note:

Biocare's VP Echelon Series of predilutes have been developed for use with Ventana® Medical Systems, BenchMark® XT Immunohistochemistry Staining System in combination with Ventana® Detection Kits and Ventana® Prep Kit Dispensers. However, it is the responsibility of the laboratory or end-user to develop their own protocol and label appropriate disclaimer.

#### References:

1. Ferdinandusse S, *et al.* Subcellular localization and physiological role of  $\alpha$ -methylacyl-CoA racemase. *J Lipid Res.* 2000; 41:1890-6.
2. Xu J, *et al.* Identification of Differentially Expressed Genes in Human Prostate Cancer Using Subtraction and Microarray. *Cancer Res.* 2000; 60:1677-82.
3. Rubin MA, *et al.*  $\alpha$ -Methylacyl Coenzyme A Racemase as a Tissue Biomarker for Prostate Cancer. *JAMA.* 2002; 287:1662-70.
4. Luo J, *et al.* Alpha-methylacyl-CoA racemase: a new molecular marker for prostate cancer. *Cancer Res.* 2002; 62:2220-6.
5. Zhou M, *et al.* Alpha-Methylacyl-CoA Racemase A Novel Tumor Marker Overexpressed in Several Human Cancers and Their Precursor Lesions. *Am J Surg Pathol.* 2002; 26:926-31.
6. Wu CL, *et al.* Analysis of  $\alpha$ -Methylacyl-CoA Racemase (P504S) Expression in High-Grade Prostatic Intraepithelial Neoplasia. *Hum Pathol.* 2004; 35:1008-13.
7. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."
8. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.

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