

P504S-2X

Prediluted Polyclonal Antibody

Control Number: 903-365-101515

Catalog Number:	PP 365 AA, H, JJ	IP 365 G10
Description:	6.0, 25, 50 ml, prediluted	10 ml, prediluted
Dilution:	Ready-to-use	Ready-to-use
Diluent:	N/A	N/A

Intended Use:

Analyte Specific Reagent. Analytical and performance characteristics have not been established.

Summary & Explanation:

P504S, also known as α -methylacyl coenzyme A racemase (AMACR), is a peroxisomal and mitochondrial enzyme that plays a role in bile acid synthesis and β -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 prostatic intraepithelial neoplasia (PIN) have been found to express P504S; whereas, in most cases, P504S was negative in benign glands (5-6).

Source: Rabbit polyclonal

Clone: N/A

Isotype: N/A

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. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Analyte Specific Reagent Note:

The P504S antibody has been quality controlled by IHC using Biocare's MACH 4 Detection System with antigen retrieval. 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 α -methylacyl-CoA racemase. *J Lipid Res.* 2000 Nov; 41 (11):1890-6.
2. Xu J, *et al.* Identification of differentially expressed genes in human prostate cancer using subtraction and microarray. *Cancer Res.* 2000 Mar 15; 60(6):1677-82.
3. Rubin MA, *et al.* α -methylacyl coenzyme A racemase as a tissue biomarker for prostate cancer. *JAMA.* 2002 Apr 3; 287(13):1662-70.
4. Luo J, *et al.* Alpha-methylacyl-CoA racemase: a new molecular marker for prostate cancer. *Cancer Res.* 2002 Apr 15; 62(8):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 Jul; 26(7):926-31.
6. Wu CL, *et al.* Analysis of alpha-methylacyl-CoA racemase (P504S) expression in high-grade prostatic intraepithelial neoplasia. *Hum Pathol.* 2004 Aug; 35(8):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.

