



## AMACR (RM), 3X

Prediluted Rabbit Monoclonal Antibody

Control Number: 903-3055-010413

**Catalog Number:** APA 3055 G3, H  
**Description:** 3.0, 25 ml, prediluted  
**Dilution:** Ready-to-use  
**Diluent:** N/A

### Intended Use:

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

### Summary & Explanation:

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

**Clone:** 13H4

**Isotype:** Rabbit 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:

The AMACR antibody has been quality controlled by IHC using Biocare's MACH 2 DS 2 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.

### Warranty:

There are no warranties, expressed or implied, which extend beyond this description. Biocare is not liable for property damage, personal injury, or economic loss caused by this product.

### References:

1. Ferdinandusse S, *et al.* Subcellular localization and physiological role of  $\alpha$ -methylacyl-CoA racemase. *J Lipid Res* 2000; 41:1890-1896.
2. Xu J, *et al.* Identification of Differentially Expressed Genes in Human Prostate Cancer Using Subtraction and Microarray. *Cancer Res* 2000; 60:1677-1682.
3. Rubin MA, *et al.*  $\alpha$ -Methylacyl Coenzyme A Racemase as a Tissue Biomarker for Prostate Cancer. *JAMA* 2002; 287:1662-1670.
4. Luo J, *et al.* Alpha-methylacyl-CoA racemase: a new molecular marker for prostate cancer. *Cancer Res* 2002; 62:2220-2226.
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; 26:926-931.
6. Wu CL, *et al.* Analysis of  $\alpha$ -Methylacyl-CoA Racemase (P504S) Expression in High-Grade Prostatic Intraepithelial Neoplasia. *Hum Pathol* 2004; 35:1008-1013.
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-Third Edition CLSI document M29-A3 Wayne, PA 2005.

