

## AMACR (RM)

Prediluted Rabbit Monoclonal Antibody  
903-3024-020322

**BIOCARE**  
M E D I C A L

Available Product Formats				
Format	Catalog Number	Description	Dilution	Diluent
Predilute	APA 3024 AA, H	6.0, 25 mL	Ready-to-use	N/A
ONCORE Pro	OPAA 3024 T60	60 tests	Ready-to-use	N/A
UltraLine	AVA 3024 G	6.0 mL	Ready-to-use	N/A
Q Series	ALA 3024 G7	7.0 mL	Ready-to-use	N/A

### Intended Use:

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

**Source:** Rabbit monoclonal

**Clone:** 13H4

**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. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date.

### References:

1. Ferdinandusse S, *et al.* Subcellular localization and physiological role of alpha-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.* alpha-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 over-expressed 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.



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