p504S/α-Methylacyl-CoA Racemase (AMACR)

Rabbit Polyclonal Antibody

RP13-6

RP13-25

RP13-100

Document #: IFU-RP13_p504S/α-Methylacyl-CoA Racemase
Release Date: 12/01/2017, IFU-033 Rev B

Intended Use

Analyte Specific Reagent (ASR). Analytical and performance charaacteristics are not established.

Summary and Explanation

P504A, also known as α-methylacyl coenzyme A racemase (AMACR), is a peroximsomal and mirochrondrial 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 to 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)

Format

Purified immunoglobulin fraction of rabbit antiserum against AMACR containing sodium azide as a preservative.

Known Applications:

Immunohistochemistry (formalin-fixed paraffin-embedded Tissues)

Storage and Handling

Store at 2-8°C. This antibody is suitable for use until expiry date when stored at 2-8°C. Do not use product after the expiration date printed on vial. If reagents are stored under a condition other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly. Unused portions of antibody preparation should be discarded after one day.

The presence of precipitate or an unusual odor indicates that the antibody is deteriorating and should not be used.

Precautions

This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN3) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for disease control, 1976, National Institute of Occupational Safety and Health, 1976). Specimens, before and after fixation and all materials exposed to them, should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water. Microbial contamination of reagents may result in an increase in nonspecific staining. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change. The SDS is available upon request.

Analyte Specific Reagent Note:

This antibody has been quality controlled by IHC using Ultra High™ High Def Polymer Detection kit(s) 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 a-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.*α-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 α-Methylacryl-CoA Racemase (P504S) Expression in High-Grade Prostatic Intraepithelial Neoplasia. Hum Pathol. 2004; 35-1008-13.

Manufactured for
StatLab Medical Laboratory
2090 Commerce Drive
McKinney, TX 75069
800-442-3573
www.StatLab.com

ASR