

## AMACR+P63 Cocktail Primary Antibody

Clone: 13H4+4A4 ((Rabbit and Mouse Monoclonal))

**Localization** – Cytoplasm and Nuclear

**Host Species** – Mouse

**Ig Class** – IgG1, Kappa

### Intended Use

This antibody is designed for the specific localization of AMACR+P63 Cocktail in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

### Storage & Handling

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

### Working Principle

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

### Product Description

$\alpha$ -Methylacyl-CoA racemase (AMACR) is a key mitochondrial and peroxisomal enzyme involved in the  $\beta$ -oxidation of branched-chain fatty acids. Immunohistochemical analysis of formalin-fixed, paraffin-embedded tissue demonstrates marked overexpression of AMACR in prostatic adenocarcinoma, whereas benign prostatic glands typically lack detectable expression. Importantly, AMACR expression is also observed in prostatic intraepithelial neoplasia (PIN), a recognized precursor lesion of carcinoma. p63, a member of the p53 tumor suppressor gene family, is consistently expressed in the basal (progenitor) cell layer of stratified epithelia. In the prostate, nuclear p63 immunoreactivity is restricted to basal cells in benign prostatic glands and PIN, but is absent in prostatic adenocarcinoma. Consequently, p63 serves as a negative marker for adenocarcinoma and a reliable indicator of basal cell integrity. The combined application of AMACR (cytoplasmic staining in adenocarcinoma and PIN) and p63 (nuclear staining of basal cells in benign glands and PIN) provides a highly effective immunohistochemical panel for distinguishing benign prostatic glands, premalignant PIN lesions, and invasive adenocarcinoma, particularly in diagnostically challenging or limited tissue samples.

### Material Supplied

AMACR+P63 Cocktail antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

### Material required But Not Supplied

- Xylene
- DI Water
- Control Tissues
- Isopropyl alcohol
- Antigen retrieval buffers
- Hematoxylin
- Positive charged slides
- Blocking Reagents
- Mounting media
- Wash Buffer
- Detection System
- Cover glass

### Working Reagent Procedure

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

### Recommended Protocol

Refer the following table for the details on specific recommended protocol for this antibody.

<b>Control Tissue</b>	Prostate carcinoma	<b>Antibody Incubation Time</b>	30-60 Minutes at RT
<b>Dilution factor</b>	<b>1:20-50</b> (Antibody Diluent: DH144)	<b>Retrieval Pre-treatment</b>	<b>Tris-EDTA based HIER</b> (AR9 Buffer: DH020)

### Precautions

*This product should be used by qualified and trained professional users only.*

Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contains sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.







### Limitations

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

### Troubleshooting

For Technical Support contact us at +91 - 7506501122 or [info@dygnova.com](mailto:info@dygnova.com) or your local distributor to report unusual staining.

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	Manufacturer Details		Use by Date	<b>LOT</b>	Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use	<b>REF</b>	Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests	<b>IVD</b>	In-vitro Diagnostic Medical Device