PIN Cocktail (P504S + p63)
Prediluted Cocktail Antibody
Control Number: 902-201-030708

Catalog Number: PPM 201 AA, H
Description: 6.0, 25 ml, prediluted
Dilution: Ready-to-use
Diluent: N/A

Intended Use:
For Research Use Only

Summary and Explanation:
P504S is an enzyme in the β-oxidation of branched-chain fatty acids. Expression of P504S protein is found in prostatic adenocarcinoma but not in benign prostatic tissue. It has also been found to stain premalignant lesions of the prostate: high-grade prostatic intraepithelial neoplasia (PIN) and atypical adenomatous hyperplasia. P504S can be used as a positive marker for PIN. It will be useful to confirm the diagnosis of small foci of prostate carcinoma in needle biopsies. P504S stains the majority prostate cancer, however, P504S has been shown to stain many other types of carcinoma such as hepatoma, breast carcinoma, pancreatic islet tumor and desmoplastic small round cell tumor (Miller and Tacha)1.

p63 encodes for different isotypes able to either transactivate p53 reporter genes (TAp63) or act as p53-dominant-negatives. P63 is detected in prostate basal epithelial nuclei in normal prostate, however, is negative in malignant tumors of the prostate gland. Thus p63 is useful as a differential marker for benign and malignant tumors of prostate gland and can be useful as a negative marker.

The combination of P504S and p63 (PIN cocktail) may be extremely useful for diagnosing prostatic intraepithelial neoplasia (PIN), especially in difficult and limited tissues cases. This antibody cocktail may eliminate the need for HMW CK [34ßE12]. P504S stains cytoplasm in prostate adenocarcinoma and atypical adenomatous hyperplasia; p63 stains nuclei in normal (negative marker) and benign prostate glands. In this instance, the PIN Cocktail becomes a double stain procedure. (A goat anti-mouse and rabbit universal detection kit must be used.)

Source: Rabbit polyclonal and Mouse monoclonal

Species Reactivity: Human; others not tested.

Clone: BC4A4 (p63)
Isotype: Mouse IgG2a (p63)

Total Protein Concentration: ~10 mg/ml

Epitope/Antigen: P504S + p63

Cellular Localization: Granular cytoplasmic (P504S) and nuclear (p63)

Positive Control: Prostatic intraepithelial neoplasia or prostate cancer

Normal Tissue: N/A

Abnormal Tissue: Prostate Intraepithelial neoplasm

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.

Protocol Recommendations

Peroxide Block:
If using an HRP system, block for 5 minutes with BIOCARE's PEROXIDAZED 1.

Pretreatment Solution (recommended): Reveal

Pretreatment Protocol:
Heat Retrieval Method:
Retrieve sections under pressure using BIOCARE's Decloaking Chamber, followed by a wash in distilled water. Alternatively, steam tissue sections for 45-60 minutes. Allow solution to cool for 20 minutes then wash in distilled water.

Avidin-Biotin Block is required:
1. Apply Avidin solution for 10 minutes and wash with TBS wash buffer.
2. Apply Biotin solution for 10 minutes and wash with TBS wash buffer.

Protein Block:
Incubate for 10-15 minutes at RT with BIOCARE's Background Sniper.

Primary Antibody: Incubate for 30 minutes at RT.

Link: Incubate for 10 minutes at RT with a link

Label: Incubate for 10 minutes at RT with a label

Chromogen:
Incubate for 5 minutes at RT when using BIOCARE's DAB. - OR - Incubate for 10 minutes at RT when using BIOCARE's Vulcan Fast Red.

Technical Note:
This antibody has been standardized with BIOCARE's 4 plus detection system. It can also be used on an automated staining system and with other BIOCARE polymer detection kits. Use TBS buffer for washing steps.

Performance Characteristics:
The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to: fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of BIOCARE products. Ultimately, it is the responsibility of the investigator to determine optimal conditions. These products are tools that can be used for interpretation of morphological findings in conjunction with other diagnostic tests and pertinent clinical data by a qualified pathologist.

Quality Control:
Refer to NCCLS Quality Assurance for Immunocytochemistry approved guidelines, December 1999 MM4-A Vol.19 No.26 for more information about Tissue Controls.

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 MSDS is available upon request.

Troubleshooting:
Follow the antibody specific protocol recommendations according to data sheet provided. If atypical results occur, contact BIOCARE's Technical Support at 1-800-542-2002.

Limitations and 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: