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Polyclonal Antibody to PIN-4 Antibody Coktail

Catalog No.: AM08004

Quantity: 6 ml

Uniprot ID: Q9Y237

NCBI: NP_006214.2

GeneID: 5303

Format: **Buffer System:** The antibody solutions contain Sodium Azide and Proclin 300 as preservatives. The solutions are Thimerosol-free.

Applications: Immunohistochemistry.
Staining Protocol:
We suggest an incubation period of 30 minutes at room temperature. Formalin fixed paraffin embedded tissue sections require high temperature antigen unmasking with 10 mM citrate buffer, pH 6.0 prior to immunostaining.
Positive Control Prostatic intraepithelial neoplasia (PIN).
Cellular Localization: Nuclear for P63 and Cytoplasmic for both Cytokeratin (HMW) and P504S (AMACR).
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody product has been optimized for dual staining Immunohistochemistry on automated stainers (e.g. Ventana, Leica, DAKO).
In Prostate Tissues: The combined detection of p504S, p63 and high molecular weight cytokeratin markers has been shown to be useful for distinguishing benign conditions mimicking cancer from prostate carcinomas. In particular, these markers have been shown to be relevant in diagnosing the premalignant condition, prostatic intraepithelial neoplasia (PIN).
High molecular weight cytokeratin and p63 are commonly used markers of basal epithelial cells. Benign prostate tissue contains basal cells, which are absent in prostate cancers. P504S has been recently described as a prostate cancer-specific gene. Expression of p504S (AMACR) protein is seen in prostatic adeno-carcinoma but not in benign prostatic tissue. Anti-p540S stains premalignant lesions of prostate: high-grade PIN and atypical adenomatous hyperplasia.
The PIN-4 antibody combination may be particularly useful for confirming the diagnosis of prostate carcinoma in small foci of needle biopsies. The positive prostate cancer marker, p504S (AMACR), in conjunction with the negative basal cell markers (p63 and HMW cytokeratin) offers utility in diagnosing PIN in difficult cases where tissue may be limiting.

Add. Information: **Description:** This reagent is a cocktail containing the three (3) antibodies described below.

Monoclonal mouse antibody to human P63.

Anti-P63 is a monoclonal mouse antibody, clone 4A4, produced by immunization with a recombinant protein derived from amino acid 1-205 of human p63. The isotype is IgG2a, kappa. This antibody recognizes a 63 kD protein, which is highly expressed in the basal or progenitor layers of many epithelial tissues.

Monoclonal mouse antibody to human cytokeratin (HMW).
The anti-cytokeratin (HMW) is a monoclonal mouse antibody, clone 34βE12, produced from immunization with solubilized keratin extract from human stratum corneum. The isotype is IgG1, kappa. This antibody recognizes keratin polypeptides of 68, 58, 56.5 and 50 kD in stratum corneum extracts. The antibody reacts with squamous, ductal and other complex epithelia.

Rabbit anti-p504S (AMACR) antibody. Anti-p504S (AMACR) is a polyclonal rabbit antibody, produced by immunization with synthetic human AMACR peptide. The antibody comes from a purified immunoglobulin fraction of rabbit antiserum against AMACR. P504S (AMACR) encodes a protein involved in the beta-oxidation of branched chain fatty acids.

Storage:
Store the antibody at 2-8°C
Shelf life: one year from despatch.

Caution:
This cocktail should be detected with sequential application of UnoVueTM 1-Step Polymer Mouse HRP and UnoVueTM 1-Step Rabbit AP Polymer rather than broad spectrum polymer reagents.

General Readings:
1. Beach et al. Am J Surg Pathol 26 (12): 1588, 2002.
2. Luo et al. Cancer Res 62 (8): 2220, 2002.
3. Molinie et al. Mod Pathol 17: 1180, 2004.
4. Tacha and Miller Appl Immunohistochem Mol Morphol 12 (1): 75, 2004.
5. Signoretti et al. Am J Pathol 157 (6): 1769, 2000.
6. Wang et al. Differentiation 68 (4-5): 270, 2001.
7. Yang et al. Mol Cell 2: 305, 1998.