

# AMACR + p63 (13H4 + 4A4)

## Rabbit and Mouse Monoclonal Antibodies

**Specificity:** Humans

**Immunogen:** Human AMACR (P504S) and p63 polypeptides

**Ig Class:** IgG, IgG1a/k

**Storage:** Store at 2-8°C for up to 2 years for concentrate form and 1 year for predilute form

**Staining procedures:** Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:50. *Positive Control:* Prostate carcinoma. *Localization:* Cytoplasmic and nuclear. *Intended Use:* Research Use Only (RUO).

**Description:** AMACR is an essential enzyme in the beta-oxidation of branched-chain fatty acids. High expression of AMACR protein is found in prostate adenocarcinoma but not in benign prostate tissue by immunohistochemical staining in paraffin-embedded tissue. The expression of AMACR is also detected in prostate premalignant lesions, such as prostate intraepithelial neoplasia (PIN). The p63 protein, a homologue of the tumor-suppressor p53, is highly expressed in the basal or progenitor layer of many epithelial tissues. P63 is detected in prostate basal cells in normal prostate glands and PIN. However, it is negative in prostate adenocarcinoma. Thus, p63 is useful as a differential marker for benign prostate glands and adenocarcinoma (negative marker). The combination of AMACR and p63 may be extremely useful for diagnosing PIN and small focus adenocarcinoma, especially in difficult cases and cases with limited tissues. AMACR stains cytoplasm in prostate adenocarcinoma and PIN while p63 stains basal cell nuclei in PIN and benign prostate gland.

**Intended Use:** This antibody is intended for research use only (RUO). AMACR (13H4) and p63 (4A4) rabbit and mouse monoclonal primary antibodies are intended for laboratory use in the detection of AMACR and p63 in formalin-fixed, paraffin-embedded tissue by immunohistochemical (IHC) staining. The staining results should be interpreted by qualified pathologists in conjunction with the patient's relevant clinical history.

**Supplied As:** Purified antibody in Tris-HCl buffer containing stabilizing protein and <0.1% ProClin.

### References:

1. Yang A, et. al. Mol Cell.1998;2:305-16.
2. Signoretti S, et. al. Am J Pathol.2000;157:1769-75.
3. Wu CL, et. al. Hum Pathol. 2004; 35:1008-13.

**[REF] Z2005MRL-R/ Z2005MRS-R/ Z2005MRT-R/ Z2005MRP-R (1.0ml Concentrate/ 0.5ml Con./ 0.1ml Con./ 7ml Pre-dil)**