3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-AMACR (P504S)
produced in rabbit, affinity isolated antibody

Catalog Number **A8856**

Product Description

Anti-AMACR (P504S) is produced in rabbit using as immunogen a synthetic peptide corresponding to residues 33-48 [RVDRPGSRYDVSRLGR] of human AMACR (P504S) (GeneID 23600). The antibody is affinity-purified.

Anti-AMACR (P504S) recognizes human AMACR (P504S). Applications include the detection of AMACR (P504S) by immunoblotting (~42 kDa) and immunohistochemistry.

Prostate-specific antigen (PSA) screening for prostate cancer is now widespread in the United States among men of all ages. However PSA has limited specificity because benign disease, including prostatic enlargement and inflammation, can increase PSA levels. Thus, a more specific prostate cancer marker is needed. One such potential marker is {alpha}-methylacyl-CoA racemase (AMACR), also known as P504S, an enzyme that is involved in peroxisomal {beta}-oxidation of dietary branched-chain fatty acids. Recent studies have shown that, compared with expression in normal or benign prostate epithelium, AMACR is consistently over-expressed in prostate cancer epithelium, making it a specific marker for cancer cells within the prostate gland. Furthermore, over-expression of AMACR may increase the risk of prostate cancer because its expression is increased in pre-malignant lesions (prostatic intraepithelial neoplasia).

Reagent

Supplied as a solution in phosphate buffered saline, containing 0.02% sodium azide.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to three months. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended.

Product Profile

Immunoblotting: a working dilution of 1:500 is recommended.

Immunohistochemistry: a working dilution of 1:100 is recommended. An incubation period of 30 minutes at room temperature is suggested. Formalin fixed paraffin embedded tissue sections require high temperature antigen unmasking with 10 mM citrate buffer, pH 6.0 prior to immunostaining.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Ferdinandusse, S., et al., Mutations in the gene encoding peroxisomal alpha-methylacyl-CoA racemase cause adult-onset sensory motor neuropathy. *Nature Genet.* **24**: 188-191 (2000).

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