

## p504S Antibody / AMACR [clone 13H4] (V8770)

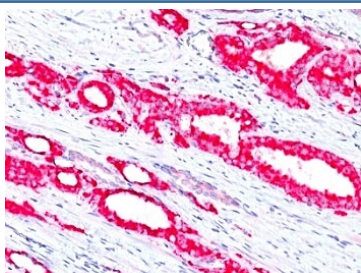
Catalog No.	Formulation	Size
V8770-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8770-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8770SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug



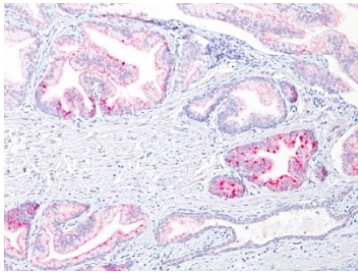
Citations (8)

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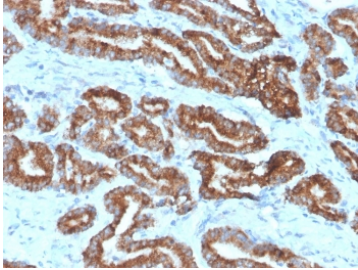
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	13H4
Purity	Protein A affinity chromatography
UniProt	Q9UHK6
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 1-2ug/ml
Limitations	This p504S antibody is available for research use only.



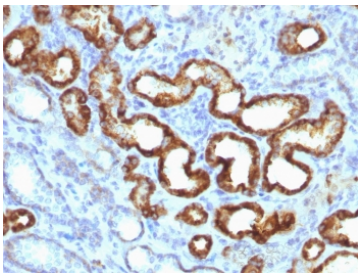
Formalin-fixed, paraffin-embedded human prostate carcinoma stained with p504S antibody (clone 13H4).



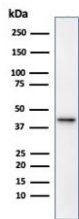
Formalin-fixed, paraffin-embedded human prostate carcinoma stained with p504S antibody (clone 13H4).



IHC staining of FFPE human prostate carcinoma with p504S antibody (clone 13H4).  
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human renal cell carcinoma with p504S antibody (clone 13H4).  
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Western blot testing of human kidney lysate with p504S antibody. Predicted molecular weight ~43 kDa.

## Description

p504S antibody detects alpha-methylacyl-CoA racemase, an enzyme encoded by the AMACR gene. p504S is strongly expressed in prostate carcinoma and is considered one of the most reliable markers for prostate cancer pathology. Because p504S is absent or weak in benign prostate tissue but upregulated in malignancy, p504S antibody is indispensable in oncology, diagnostic pathology, and urology.

AMACR functions in the beta-oxidation of branched-chain fatty acids and bile acid intermediates. Its enzymatic activity contributes to lipid metabolism in peroxisomes and mitochondria. Dysregulated AMACR expression has been linked not only to prostate cancer but also to other malignancies, including colorectal carcinoma and renal cell carcinoma. p504S serves as a robust marker of prostatic malignancy in pathology practice.

The p504S antibody clone 13H4 provides specific and reproducible recognition. Clone 13H4 has been cited extensively in peer-reviewed publications investigating prostate cancer diagnosis, biomarker validation, and cancer metabolism. Its reproducibility makes it suitable for immunohistochemistry, immunoblotting, and tissue-based diagnostics where accuracy is critical.

Research using clone 13H4 has confirmed that p504S expression distinguishes malignant from benign prostatic glands,

even in challenging or borderline cases. In oncology, detection of AMACR complements PSA and basal cell markers in diagnostic panels. This antibody has also supported studies investigating metabolic reprogramming in cancer, where AMACR overexpression contributes to altered lipid metabolism and tumor growth.

NSJ Bioreagents provides this p504S antibody to support oncology, urology, and cancer metabolism research. Alternate names include AMACR antibody, alpha-methylacyl-CoA racemase antibody, prostate cancer marker antibody, fatty acid metabolism enzyme antibody, and metabolic biomarker antibody.

## Application Notes

Optimal dilution of the p504S antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 min
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

Full length human recombinant protein was used as the immunogen for the p504S antibody.

## Storage

Store the p504S antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).