

For Research Use Only

# AMACR/p504S Recombinant monoclonal antibody, PBS Only

Catalog Number:84891-9-PBS



## Basic Information

<b>Catalog Number:</b> 84891-9-PBS	<b>GenBank Accession Number:</b> NM_014324.6	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 23600	<b>CloneNo.:</b> 250503C12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9UHK6-1	
<b>Isotype:</b> IgG	<b>Full Name:</b> alpha-methylacyl-CoA racemase	
<b>Immunogen Catalog Number:</b> EG4005	<b>Calculated MW:</b> 42 kDa	
	<b>Observed MW:</b> 42 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, Indirect ELISA

**Species Specificity:**  
human

## Background Information

AMACR(Alpha-methyl acyl-CoA racemase) belongs to the CaiB/BaiF CoA-transferase family. A mitochondrial and peroxisomal enzyme catalyzes the conversion of 2R stereoisomers of phytanic and pristanic acid to their S counterparts. AMACR has previously been shown to be a highly sensitive marker for colorectal and clinically localized prostate cancer (PCa). However, AMACR expression is down-regulated at the transcript and protein level in hormone-refractory metastatic PCa, suggesting a hormone-dependent expression of AMACR(PMID:12213712). It has 3 isoforms produced by alternative splicing and can form a dimer of 70-75 kDa(PMID:21812041). Defects in AMACR cause alpha-methyl acyl-CoA racemase deficiency (AMACRD) and congenital bile acid synthesis defect type 4 (CBAS4).

## Storage

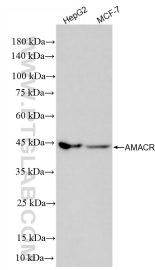
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

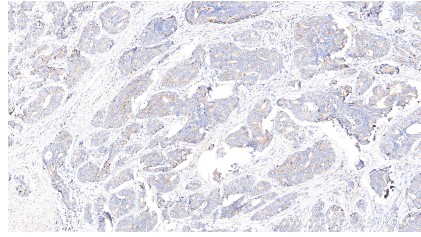
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

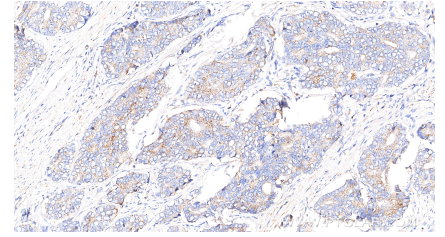
## Selected Validation Data



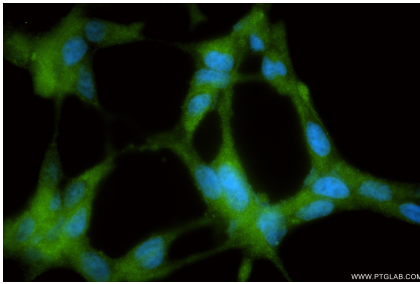
Various lysates were subjected to SDS PAGE followed by western blot with 84891-9-RR (AMACR antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84891-9-PBS in a different storage buffer formulation.



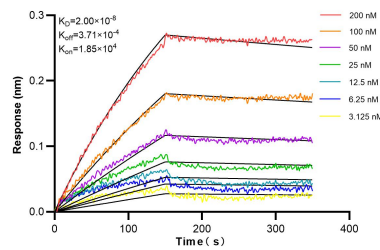
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 84891-9-RR (AMACR antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84891-9-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 84891-9-RR (AMACR antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84891-9-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed LNCaP cells using AMACR antibody (84891-9-RR, Clone: 250503C12) at dilution of 1:500 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84891-9-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 84891-9-RR against Human AMACR were performed. The affinity constant is 20.0 nM.