

For Research Use Only

# AMACR/p504S Recombinant monoclonal antibody

Catalog Number: 84891-9-RR



## Basic Information

<b>Catalog Number:</b> 84891-9-RR	<b>GenBank Accession Number:</b> NM_014324.6	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 23600	<b>CloneNo.:</b> 250503C12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9UHK6-1	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000 IHC: 1:500-1:2000 IF/ICC: 1:250-1:1000
<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, ELISA

**Species Specificity:**  
human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** HepG2 cells, MCF-7 cells

**IHC :** human prostate cancer tissue,

**IF/ICC :** LNCaP cells,

## 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 -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

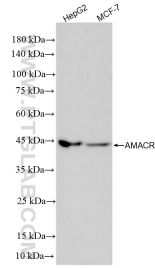
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

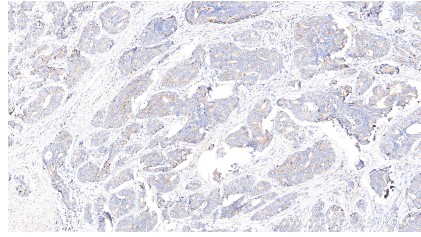
E: proteintech@ptglab.com  
W: ptglab.com

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

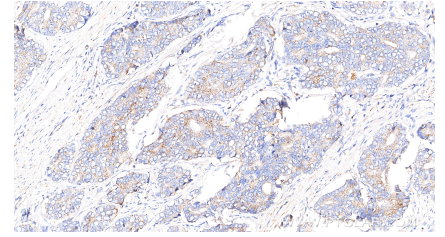
## Selected Validation Data



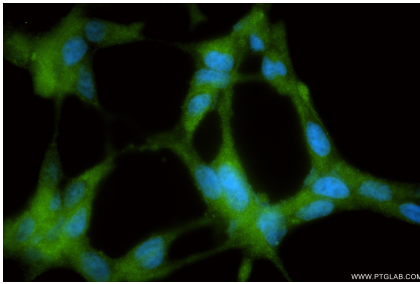
Various lysates were subjected to SDS PAGE followed by western blot with 84891-9-RR (AMACR antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



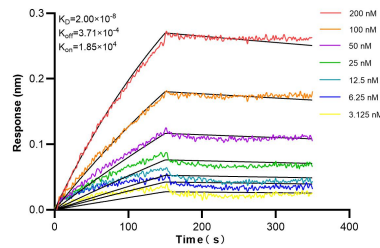
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 84891-9-RR (AMACR antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



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