

# AMACR Monoclonal Antibody(4A12)

Catalog # AP63301

## Product Information

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Application	WB, IF, ICC, IHC-P
Primary Accession	<a href="#">Q9UHK6</a>
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	42387

## Additional Information

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Gene ID	23600
Other Names	AMACR; Alpha-methylacyl-CoA racemase; 2-methylacyl-CoA racemase
Dilution	WB~~WB: 1:1000 IHC: 1:200 IF 1:200 IF~~1:50~200 ICC~~N/A IHC-P~~WB: 1:1000 IHC: 1:200 IF 1:200
Format	PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol.
Storage Conditions	-20°C

## Protein Information

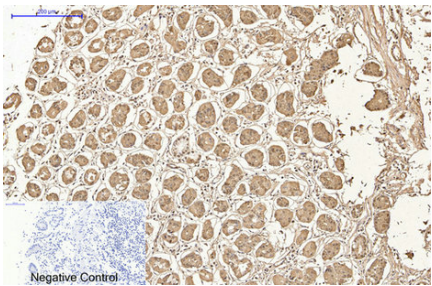
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Name	AMACR
Function	Catalyzes the interconversion of (R)- and (S)-stereoisomers of alpha-methyl-branched-chain fatty acyl-CoA esters (PubMed: <a href="#">10655068</a> , PubMed: <a href="#">11060359</a> , PubMed: <a href="#">7649182</a> ). Acts only on coenzyme A thioesters, not on free fatty acids, and accepts as substrates a wide range of alpha-methylacyl-CoAs, including pristanoyl-CoA, trihydroxycoprostanoyl-CoA (an intermediate in bile acid synthesis), and arylpropionic acids like the anti-inflammatory drug ibuprofen (2- (4-isobutylphenyl)propionic acid) but neither 3-methyl-branched nor linear-chain acyl-CoAs (PubMed: <a href="#">10655068</a> , PubMed: <a href="#">11060359</a> , PubMed: <a href="#">7649182</a> ).
Cellular Location	Peroxisome. Mitochondrion

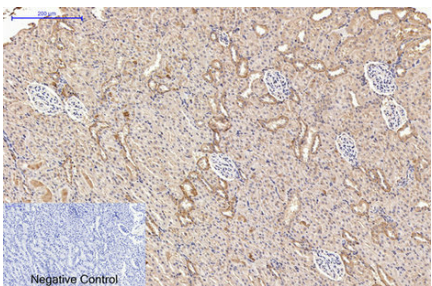
## Background

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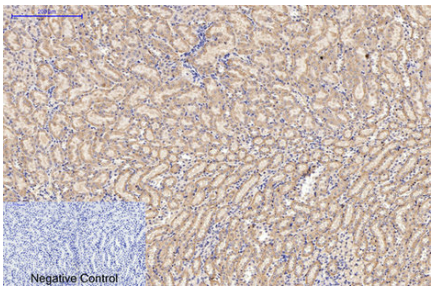
Racemization of 2-methyl-branched fatty acid CoA esters. Responsible for the conversion of pristanoyl-CoA and C27-bile acyl-CoAs to their (S)-stereoisomers.



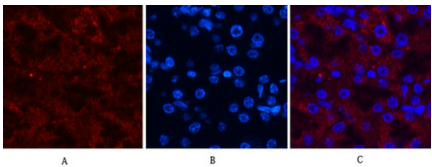
Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1,AMACR Monoclonal Antibody(4A12) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



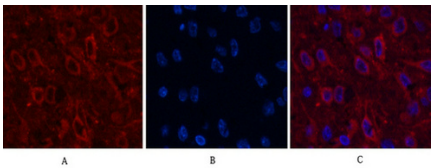
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,AMACR Monoclonal Antibody(4A12) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



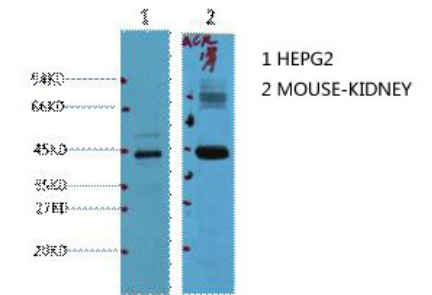
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,AMACR Monoclonal Antibody(4A12) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Mouse-kidney tissue. 1,AMACR Monoclonal Antibody(4A12)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

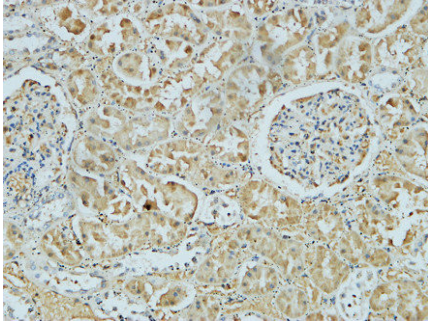
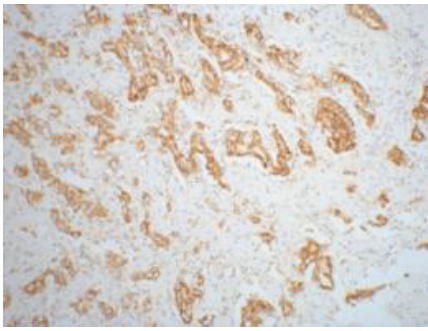


Immunofluorescence analysis of Rat-brain tissue. 1,AMACR Monoclonal Antibody(4A12)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

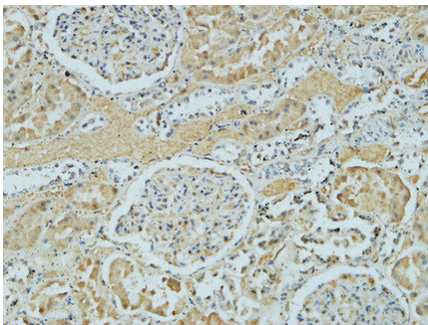


Western blot analysis of 1) HepG2, 2) Mouse Kidney, diluted at 1:1000.

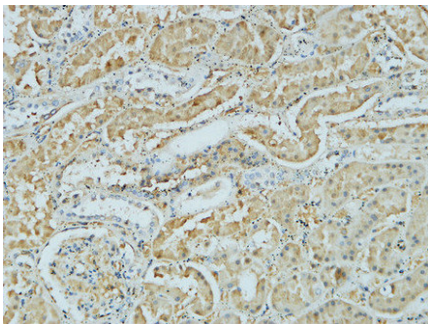
IHC staining of mouse prostate adenocarcinoma tissue, diluted at 1:200.



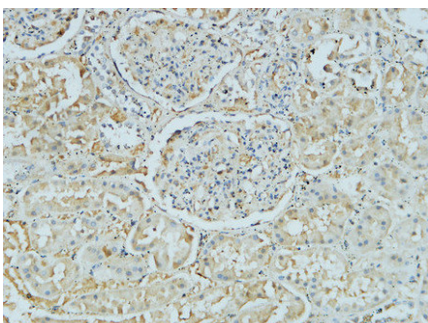
Immunohistochemical analysis of paraffin-embedded Human Right kidney. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



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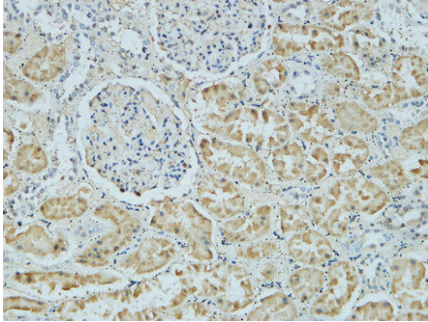
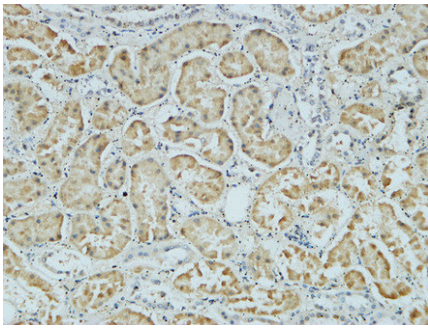
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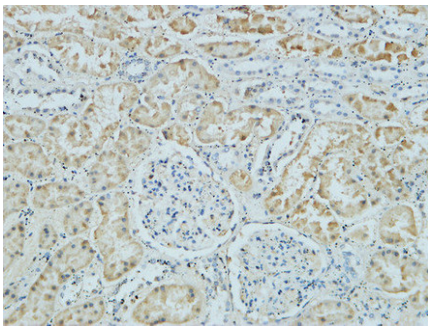
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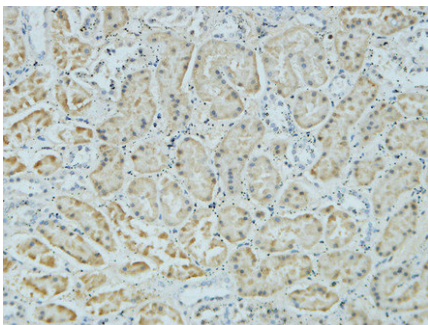




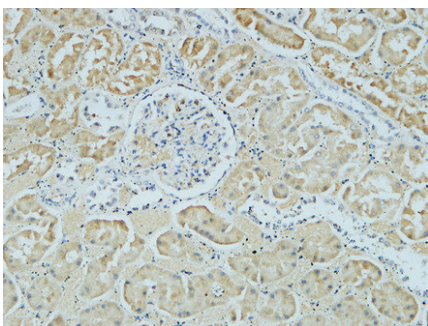
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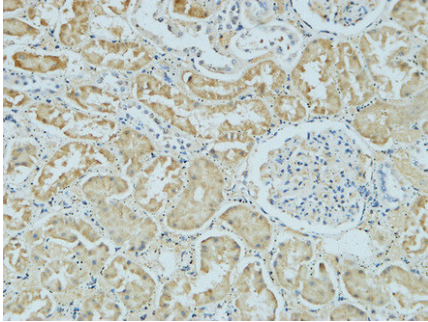
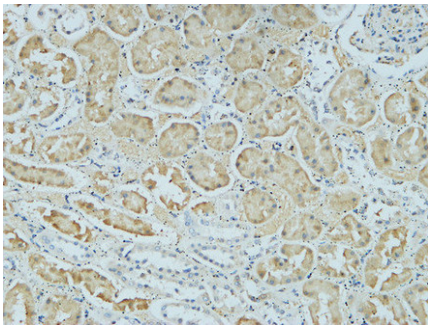


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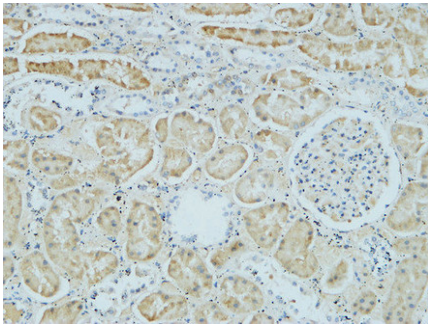


Immunohistochemical analysis of paraffin-embedded Human Right kidney. 1, Antibody was diluted at 1:400(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

Immunohistochemical analysis of paraffin-embedded Human Right kidney. 1, Antibody was diluted at 1:400(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Human Right kidney. 1, Antibody was diluted at 1:400(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



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