## AMACR Recombinant Monoclonal Rabbit Antibody (AMACR/2748R)



## **Product Description**

This antibody recognizes a protein of 42 kDa, which is identified as Alpha-methylacyl-CoA Racemase (AMACR), also known as p504S. It is an enzyme that is involved in bile acid biosynthesis and betbeta-oxidation of branched-chain fatty acids. AMACR is essential in lipid metabolism. It is expressed in cells of premalignant high-grade prostatic intraepithelial neoplasia (HGPIN) and prostate adenocarcinoma. The majority of the carcinoma cells show a distinct granular cytoplasmic staining reaction. AMACR is present at low or undetectable levels in glandular epithelial cells of normal prostate and benign prostatic hyperplasia. A spotty granular cytoplasmic staining is seen in a few cells of the benign glands. AMACR is expressed in normal liver (hepatocytes), kidney (tubular epithelial cells) and gall bladder (epithelial cells). Expression has also been found in lung (bronchial epithelial cells) and colon (colonic surface epithelium). AMACR expression can also be found in hepatocellular carcinoma and kidney carcinoma. Past studies have also shown that AMACR is expressed in various colon carcinomas (well, moderately and poorly differentiated) and over expressed in prostate carcinoma. Primary antibodies are available moderately and poorly differentiated) and over expressed in prostate carcinoma. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the <u>CF® Dye Brochure</u> for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status**: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order. Catalog number key for antibody number 2748, Anti-AMACR / p504S

Product at
Antibody num
research-area
Antibody read

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Product attributes			
Antibody number	#2748		
research-areas	Cancer, Endocrinology, Metabolism		
Antibody reactivity	AMACR		
Antibody type	Primary		
Host species	Rabbit		
Clonality	Recombinant Monoclonal		
Clone	AMACR/2748R		
Isotype	IgG		
Molecular weight	42 kDa		
Synonyms	Alpha-methylacyl-CoA Racemase; AMACR; p504S; CBAS4; RACE		
Human gene symbol	AMACR		
Entrez gene ID	23600		
SwissProt	Q9UHK6		
Unigene	508343		
Immunogen	Recombinant human AMACR protein fragment (around aa 297-394) (exact sequence is proprietary)		
Verified antibody	IHC (FFPE) (verified), WB (verified)		
applications Antibody target cellular	Plasma membrane, Vesicular		
Species reactivity	Human		
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunohistology (formalin): 1-2 ug/mL for 30 minutes at RT, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user		
Positive control	HEK cells or Prostate Adenocarcinoma		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Regulatory status	For research use only (RUO)		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide		
Antibody research areas	Cancer, Endocrinology, Metabolism		
Tumor expression	Prostate cancer		

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

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