

## Basic Information

<b>Product Name</b>	Anti-PRKAR1A Antibody (Clone#OTI6C7)	
<b>Gene Name</b>	PRKAR1A	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG1	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF	
<b>Contents</b>	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.	
<b>Immunogen</b>	Full-length protein expressed in 293T cell transfected with human PRKAR1A expression vector	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)	
<b>Observed MW</b>	43 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:2000 Immunohistochemistry (IHC): 1:50 Immunocytochemistry/Immunofluorescence (ICC/IF):1:100	

## Storage

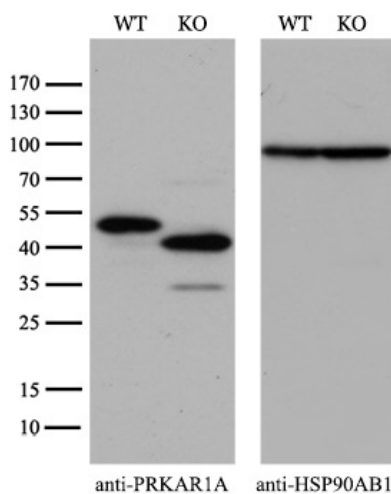
Stable for 12 months from date of receipt. Store at -20°C as received.

## Background Information

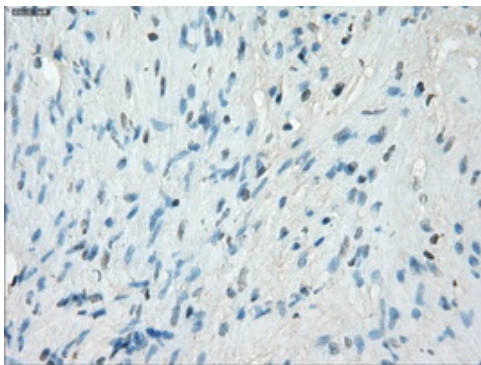
cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. This gene encodes one of the regulatory subunits. This protein was found to be a tissue-specific extinguisher that down-regulates the expression of seven liver genes in hepatoma x fibroblast hybrids. Mutations in this gene cause Carney complex (CNC). This gene can fuse to the RET protooncogene by gene rearrangement and form the thyroid tumor-specific

chimeric oncogene known as PTC2. A nonconventional nuclear localization sequence (NLS) has been found for this protein which suggests a role in DNA replication via the protein serving as a nuclear transport protein for the second subunit of the Replication Factor C (RFC40). Three alternatively spliced transcript variants encoding the same protein have been observed.

## Selected Validation Data



Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT) and PRKAR1A-Knockout 293T cells (KO) were separated by SDS-PAGE and immunoblotted with anti-PRKAR1A monoclonal antibody M00699, (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90AB1 antibody ([MA01692]) as a loading control.



Immunohistochemical staining of paraffin-embedded prostate tissue within the normal limits using anti-PRKAR1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, M00699, Dilution 1:50)

Product datasheet

**Anti-PRKAR1A Antibody  
(Clone#OTI6C7)**

**Catalog Number: M00699**

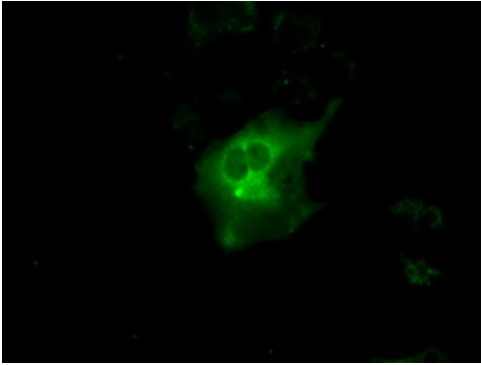
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Anti-PRKAR1A mouse monoclonal antibody immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PRKAR1A .