

Datasheet: VMA00270

Description:	MOUSE ANTI PRKAR1A
Specificity:	PRKAR1A
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	OTI6C7
Isotype:	IgG1
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse, Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Mouse monoclonal antibody purified by affinity chromatography from ascites.

Buffer Solution

Phosphate buffered saline.

Preservative Stabilisers

0.09% Sodium Azide (NaN₃)
1% Bovine Serum Albumin
50% Glycerol

Approx. Protein Concentrations	IgG concentration 0.5 mg/ml.
Immunogen	Full-length protein expressed in 293T cell transfected with human PRKAR1A expression vector
External Database Links	<p>UniProt: P10644 Related reagents</p> <p>Entrez Gene: 5573 PRKAR1A Related reagents</p>
Synonyms	PKR1, PRKAR1, TSE1
Specificity	<p>Mouse anti Human PRKAR1A antibody recognizes the cAMP-dependent protein kinase type I-alpha regulatory subunit, also known as Carney complex type 1, cAMP-dependent protein kinase regulatory subunit RIalpha, cAMP-dependent protein kinase type I-alpha regulatory chain, cAMP-dependent protein kinase type I-alpha regulatory subunit, protein kinase A type 1a regulatory subunit and tissue-specific extinguisher 1.</p> <p>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. PRKAR1A 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 PRKAR1A gene cause Carney complex (CNC). PRKAR1A 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). Several alternatively spliced transcript variants encoding two different isoforms have been observed (provided by RefSeq, Jan 2013).</p> <p>Mouse anti Human PRKAR1A antibody detects a band of 43 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.</p>
Western Blotting	Anti PRKAR1A detects a band of approximately 43 kDa in Jurkat cell lysates.
Storage	Store undiluted at -20°C, avoiding repeated freeze thaw cycles.
Guarantee	12 months from date of despatch.
Acknowledgements	PrecisionAb is a trademark of Bio-Rad Laboratories.

**Health And Safety
Information**

Material Safety Datasheet documentation #10048 available at:
<https://www.bio-rad-antibodies.com/SDS/VMA00270>
Antibody (10048)

Regulatory

For research purposes only.

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
'M397892:220621'

Printed on 25 Mar 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)