# abcam

# Product datasheet

# Anti-PRKAR1A (phospho S77) antibody [EPMAYR1-127] - BSA and Azide free ab248879

Recombinant

RabMAb

# 2 Images

#### Overview

Product name Anti-PRKAR1A (phospho S77) antibody [EPMAYR1-127] - BSA and Azide free

**Description** Rabbit monoclonal [EPMAYR1-127] to PRKAR1A (phospho S77) - BSA and Azide free

Host species Rabbit

Specificity This antibody only detects Protein Kinase A regulatory subunit I alpha/PRKAR1A phosphorylated

at serine 77.

Tested applications Suitable for: WB

Unsuitable for: ICC/IF or IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

**General notes** ab248879 is the carrier-free version of <u>ab139682</u>.

This antibody was developed as part of a collaboration between Abcam and the lab of Dr. Ozgur

Ogut at the Mayo Clinic.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply

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- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

**Purity** Affinity purified

**Clonality** Monoclonal

Clone number EPMAYR1-127

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab248879 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 43 kDa.

**Application notes** Is unsuitable for ICC/IF or IHC-P.

#### **Target**

**Tissue specificity** Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta. Their expression

varies among tissues and is in some cases constitutive and in others inducible.

**Involvement in disease** Defects in PRKAR1A are the cause of Carney complex type 1 (CNC1) [MIM:160980]. CNC is a

multiple neoplasia syndrome characterized by spotty skin pigmentation, cardiac and other

myxomas, endocrine tumors, and psammomatous melanotic schwannomas.

Defects in PRKAR1A are the cause of intracardiac myxoma (INTMYX) [MIM:255960]. Inheritance

is autosomal recessive.

Defects in PRKAR1A are the cause of primary pigmented nodular adrenocortical disease type 1 (PPNAD1) [MIM:610489]. Primary pigmented nodular adrenocortical disease is a rare bilateral adrenal defect causing ACTH-independent Cushing syndrome. Macroscopic appearance of the adrenals is characteristic with small pigmented micronodules observed in the cortex. PPNAD1 is most often diagnosed in patients with Carney complex, but it can also be observed in patients

without other manifestations or familial history.

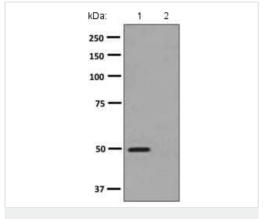
Sequence similarities Belongs to the cAMP-dependent kinase regulatory chain family.

Contains 2 cyclic nucleotide-binding domains.

# Post-translational modifications

The pseudophosphorylation site binds to the substrate-binding region of the catalytic chain, resulting in the inhibition of its activity.

## **Images**



Western blot - Anti-PRKAR1A (phospho S77) antibody [EPMAYR1-127] - BSA and Azide free (ab248879) **All lanes :** Anti-PRKAR1A (phospho S77) antibody [EPMAYR1-127] (ab139682) at 1/1000 dilution

Lane 1: Fetal heart lysate

Lane 2: Fetal heart lysate treated with Alkaline Phosphatase

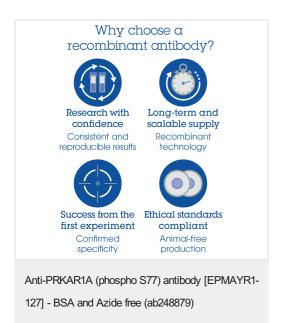
Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 43 kDa

This data was developed using <u>ab139682</u>, the same antibody clone in a different buffer formulation.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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