# abcam

#### Product datasheet

## Alexa Fluor® 594 Anti-ATP5A antibody [EPR13030(B)] ab216385

Recombinant RabMAb

#### 1 References 2 Images

#### Overview

**Product name** Alexa Fluor® 594 Anti-ATP5A antibody [EPR13030(B)]

**Description** Alexa Fluor® 594 Rabbit monoclonal [EPR13030(B)] to ATP5A

**Host species** Rabbit

Alexa Fluor® 594. Ex: 590nm, Em: 617nm Conjugation

**Tested applications** Suitable for: ICC/IF Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

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

Positive control ICC/IF: HeLa cells

**General notes** 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
- Animal-free production

For more information see here.

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

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#### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 1% BSA, 30% Glycerol (glycerin, glycerine), PBS

Purity Protein A purified

Clonality Monoclonal
Clone number EPR13030(B)

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab216385 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
ICC/IF		1/1000. This product gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min)

### **Target**

**Function** 

Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core, and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Subunits alpha and beta form the catalytic core in F(1). Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits. Subunit alpha does not bear the catalytic high-affinity ATP-binding sites.

Tissue specificity

Fetal lung, heart, liver, gut and kidney. Expressed at higher levels in the fetal brain, retina and

spinal cord.

Sequence similarities

Belongs to the ATPase alpha/beta chains family.

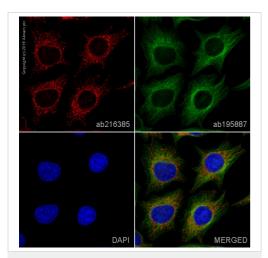
Post-translational modifications

The N-terminus is blocked.

Cellular localization

Mitochondrion inner membrane. Peripheral membrane protein.

#### **Images**

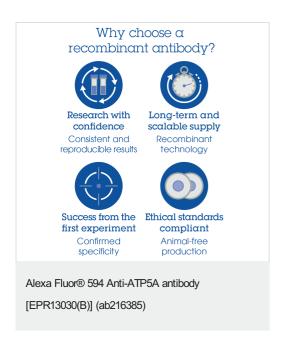


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 594 Anti-ATP5A antibody [EPR13030(B)] (ab216385)

ab216385 staining ATP5A in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab216385 at 1/1000 dilution (pseudocolored in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in HeLa cells fixed with 4% formaldehyde (10 min).



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

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