# abcam

### Product datasheet

# Anti-PHLPP2 antibody [SP220] ab227673

Recombinant RabMAb

2 References 5 Images

Overview

Product name Anti-PHLPP2 antibody [SP220]

**Description** Rabbit monoclonal [SP220] to PHLPP2

Host species Rabbit

Tested applications
Suitable for: WB, IHC-P
Species reactivity
Reacts with: Human

Predicted to work with: Mouse

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

Positive control IHC-P: Human prostate, and prostate carcinoma tissue; WB: HEK293T cell lysate.

General notes

This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

**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 long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.60

Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA

Purity Protein A/G purified

**Purification notes** Purified from TCS by protein A/G.

ClonalityMonoclonalClone numberSP220IsotypeIgG

**Applications** 

The Abpromise guarantee Our Abpromise guarantee covers the use of ab227673 in the following tested applications.

1

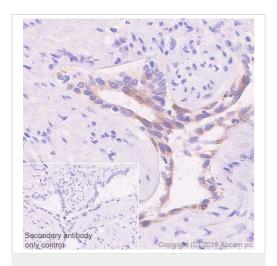
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/400. Predicted molecular weight: 147 kDa. Primary antibody incubation for 1 hour at room temperature.
IHC-P		1/100.  Perform heat mediated antigen retrieval by boiling tissue section in citrate buffer, pH 6.0 for 10 minutes followed by cooling at room temperature for 20 minutes.  Primary antibody incubation for 10 minutes at room temperature.

#### **Target**

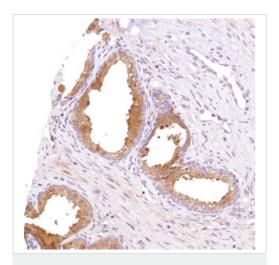
Function	Protein phosphatase that mediates dephosphorylation of 'Ser-473' of AKT1, 'Ser-660' of PRKCB isoform beta-II and 'Ser-657' of PRKCA. AKT1 regulates the balance between cell survival and apoptosis through a cascade that primarily alters the function of transcription factors that regulate pro- and antiapoptotic genes. Dephosphorylation of 'Ser-473' of AKT1 triggers apoptosis and decreases cell proliferation. Also controls the phosphorylation of AKT3. Dephosphorylation of PRKCA and PRKCB leads to their destabilization and degradation. Inhibits cancer cell proliferation and may act as a tumor suppressor.	
Tissue specificity	In colorectal cancer tissue, expression is highest in the surface epithelium of normal colonic mucosa adjacent to the cancer tissue but is largely excluded from the crypt bases. Expression is lost or significantly decreased in 80% of tested tumors (at protein level).	
Sequence similarities	Contains 22 LRR (leucine-rich) repeats.  Contains 1 PH domain.  Contains 1 PP2C-like domain.	
Cellular localization	Cytoplasm. Membrane. Nucleus. In colorectal cancer tissue, expression is concentrated in the cytoplasm and nucleus.	

## Images



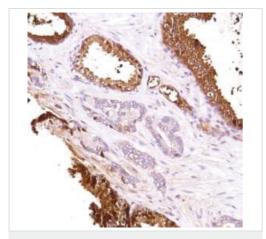
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PHLPP2 antibody
[SP220] (ab227673)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human prostate carcinoma tissue sections labeling PHLPP2 with ab227673 at 1/100 dilution (1.65  $\mu$ g/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



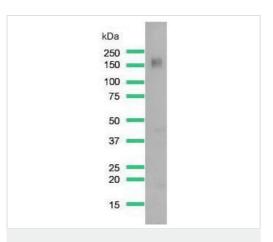
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PHLPP2 antibody
[SP220] (ab227673)

Formalin-fixed, paraffin-embedded human prostate tissue stained for PHLPP2 using ab227673 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PHLPP2 antibody
[SP220] (ab227673)

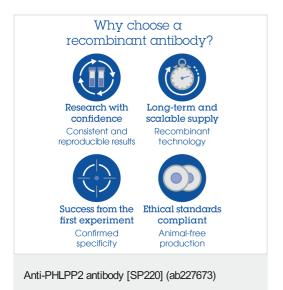
Formalin-fixed, paraffin-embedded human prostate adenocarcinoma tissue stained for PHLPP2 using ab227673 at 1/100 dilution in immunohistochemical analysis.



Western blot - Anti-PHLPP2 antibody [SP220] (ab227673)

Anti-PHLPP2 antibody [SP220] (ab227673) at 1/400 dilution + HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate.

Predicted band size: 147 kDa



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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors