abcam

Product datasheet

Anti-PKR antibody [Y117] - BSA and Azide free ab239817



יעלטעבע RabMAb

画像数8

製品の概要

特記事項

Anti-PKR antibody [Y117] - BSA and Azide free 製品名

製品の詳細 Rabbit monoclonal [Y117] to PKR - BSA and Azide free

由来種 Rabbit

特異性 This antibody does not cross-react with other GCN2 family members.

アプリケーション 適用あり: Flow Cyt (Intra), IP, IHC-P, ICC/IF, WB

種交差性 交差種: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ab239817 is the carrier-free version of ab32506.

Our carrier-free 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 cellbased 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® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] 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
- 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.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 Y117 **アイソタイプ** IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab239817の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

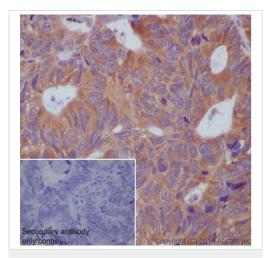
アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 68 kDa (predicted molecular weight: 62 kDa).

ターゲット情報

機能 Following activation by double-stranded RNA in the presence of ATP, the kinase becomes autophosphorylated and can catalyze the phosphorylation of the translation initiation factor EIF2S1, which leads to an inhibition of the initiation of protein synthesis. Double-stranded RNA is generated during the course of a viral infection.

配列類似性 Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily. Contains 2 DRBM (double-stranded RNA-binding) domains. Contains 1 protein kinase domain.

Autophosphorylated on several Ser and Thr residues. Autophosphorylation of Thr-451 is dependent on Thr-446 and is stimulated by dsRNA binding and dimerization. Autophosphorylation apparently leads to the activation of the kinase.

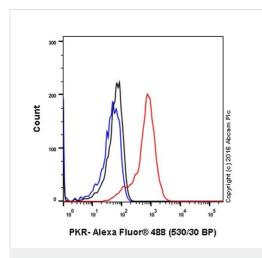


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PKR antibody [Y117] - BSA and Azide free (ab239817)

<u>ab32506</u> staining PKR in human liver carcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/100. A goat anti-rabbit IgG H&L (HRP) <u>ab97051</u> was used as the secondary antibody at a dilution of 1/500.

Negative control 1: PBS in place of primary antibody.

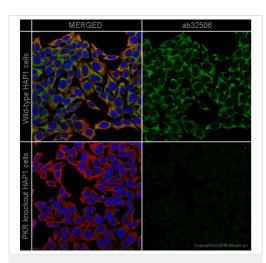
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32506).



Flow Cytometry (Intracellular) - Anti-PKR antibody [Y117] - BSA and Azide free (ab239817)

Intracellular Flow Cytometry analysis of MCF-7 (human breast carcinoma) cells labeling PKR with purified ab32506 at 1/20 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor[®] 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32506).



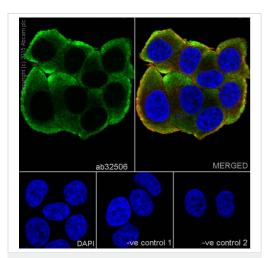
Immunocytochemistry/ Immunofluorescence - Anti-PKR antibody [Y117] - BSA and Azide free (ab239817)

<u>ab32506</u> staining PKR in wild-type HAP1 cells (top panel) and PKR knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), 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 with <u>ab32506</u> at 1/400 dilution and <u>ab7291</u> at 1ug/ml concentration overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit lgG (Alexa Fluor® 488) (<u>ab150081</u>) at 2 μg/ml (shown in green) and a goat secondary antibody to Mouse lgG (Alexa Fluor® 594) (<u>ab150117</u>) at 2ug/ml (shown in pseudo-color red). Nuclear DNA was labelled in blue with DAPI.

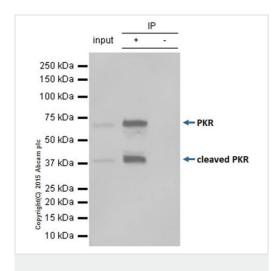
This product also gave a positive signal under the same testing conditions in HAP1 cells fixed with 4% formaldehyde (10 min).

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32506).



Immunocytochemistry/ Immunofluorescence - Anti-PKR antibody [Y117] - BSA and Azide free (ab239817)



Immunoprecipitation - Anti-PKR antibody [Y117] - BSA and Azide free (ab239817)

ab32506 staining PKR in MCF-7 (human breast carcinoma) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/100. A goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody. ab7291 and ab150120 were used as counterstains for primary antibody ab32506 and secondary antibody ab150077 respectively and DAPI was used as a nuclear counterstain.

Negative control 1: Rabbit primary antibody and anti-mouse secondary antibody (<u>ab150120</u>)

Negative control 2: Mouse primary antibody (<u>ab7291</u>) and antirabbit secondary antibody (<u>ab150077</u>)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32506).

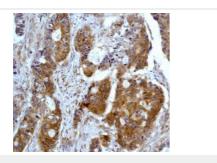
<u>ab32506</u> immunoprecipitating PKR. 10μg of cell lysate was incubated with primary antibody at a dilution of 1/40 and VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) at a dilution of 1/10000.

Lane 1: HEK293 (human embryonic kidney) whole cell lysate (10ug)

Lane 2: HEK293 (human embryonic kidney) whole cell lysate

Lane 3: Rabbit monoclonal lgG (<u>ab172730</u>) instead of <u>ab32506</u> in HEK293 (human embryonic kidney) whole cell lysate

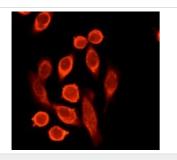
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32506**).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PKR antibody [Y117] - BSA and Azide free (ab239817)

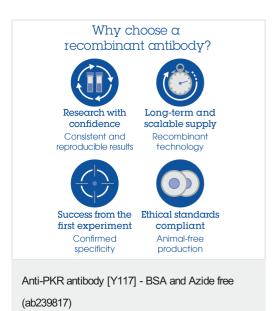
Immunohistochemical analysis of paraffin-embedded human colon carcinoma using unpurified **ab32506** at 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab32506</u>).



Immunocytochemistry/ Immunofluorescence - Anti-PKR antibody [Y117] - BSA and Azide free (ab239817) Immunofluorescent staining of HeLa cells using unpurified <u>ab32506</u> at 1/250 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab32506</u>).



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