

Product datasheet

Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] - BSA and Azide free ab223164

KO VALIDATED Recombinant RabMAb

4 Images

Overview

| | |
|----------------------------|--|
| Product name | Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] - BSA and Azide free |
| Description | Rabbit monoclonal [EPR3194] to Thymidine Kinase 1/TK1 - BSA and Azide free |
| Host species | Rabbit |
| Tested applications | Suitable for: WB, ICC/IF, Flow Cyt (Intra) Unsuitable for: IHC-P or IP |
| Species reactivity | Reacts with: Human |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | WB: Wild-type HAP1 whole cell lysate. Jurkat and MOLT-4 whole cell lysate. ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells |
| General notes | <p>ab223164 is the carrier-free version of ab91651.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit</p> |

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.

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 | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR3194 |
| Isotype | IgG |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab223164 in the following tested applications.

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

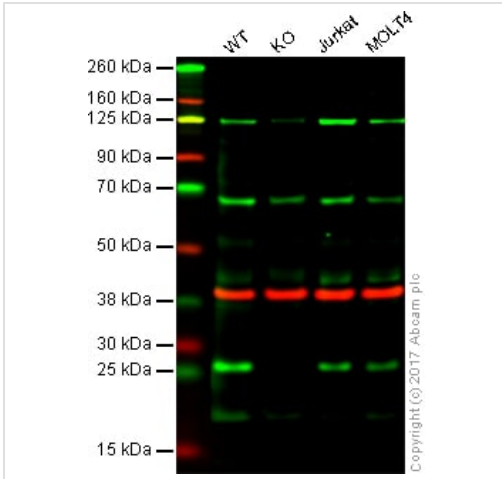
| Application | Abreviews | Notes |
|------------------|-----------|--|
| WB | | Use at an assay dependent concentration. Predicted molecular weight: 25 kDa. |
| ICC/IF | | Use at an assay dependent concentration. |
| Flow Cyt (Intra) | | Use at an assay dependent concentration. |

Application notes Is unsuitable for IHC-P or IP.

Target

| | |
|---|---|
| Sequence similarities | Belongs to the thymidine kinase family. |
| Post-translational modifications | Phosphorylated on Ser-13 in mitosis. |
| Cellular localization | Cytoplasm. |

Images



Western blot - Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] - BSA and Azide free (ab223164)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

Lane 2: TK1 knockout HAP1 whole cell lysate (20 µg)

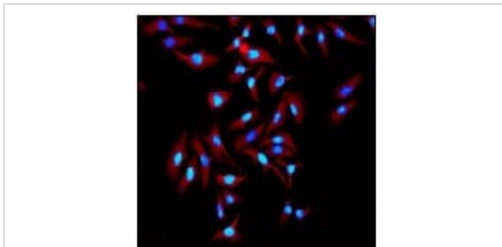
Lane 3: Jurkat whole cell lysate (20 µg)

Lane 4: MOLT4 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - **ab91651** observed at 25 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab91651 was shown to specifically recognize TK1 in wild-type HAP1 cells along with additional cross-reactive bands. No bands were observed when TK1 knockout samples were examined. Wild-type and TK1 knockout samples were subjected to SDS-PAGE. **ab91651** and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20,000 dilution for 1 hour at room temperature before imaging.

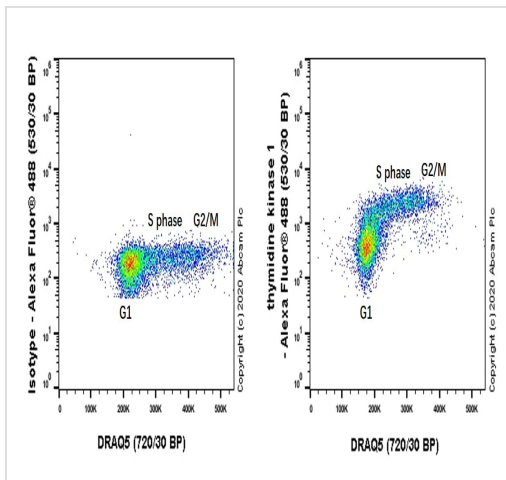
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab91651**).



Immunocytochemistry/ Immunofluorescence - Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] - BSA and Azide free (ab223164)

ab91651 at 1/100 dilution staining Thymidine kinase 1/TK1 in Hela cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab91651**).







Flow Cytometry (Intracellular) - Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] - BSA and Azide free (ab223164)

This data was developed using **ab91651**, the same antibody clone in a different buffer formulation.

Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Thymidine Kinase 1/TK1 with purified **ab91651** at 1/1000 dilution (1 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Left).

Why choose a recombinant antibody?

| | |
|--|--|
|  <p>Research with confidence Consistent and reproducible results</p> |  <p>Long-term and scalable supply Recombinant technology</p> |
|  <p>Success from the first experiment Confirmed specificity</p> |  <p>Ethical standards compliant Animal-free production</p> |

Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] - BSA and Azide free (ab223164)

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

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