

## Product datasheet

# Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] ab91651

**KO VALIDATED** Recombinant RabMAb<sup>®</sup>

[4 References](#) [5 Images](#)

### Overview

<b>Product name</b>	Anti-Thymidine Kinase 1/TK1 antibody [EPR3194]
<b>Description</b>	Rabbit monoclonal [EPR3194] to Thymidine Kinase 1/TK1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF, Flow Cyt (Intra) <b>Unsuitable for:</b> IHC-P or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human Thymidine Kinase 1/TK1 aa 200-300. The exact sequence is proprietary.
<b>Positive control</b>	WB: Wild-type HAP1 whole cell lysate. Jurkat and MOLT-4 whole cell lysate. ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

	supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3194
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab91651 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

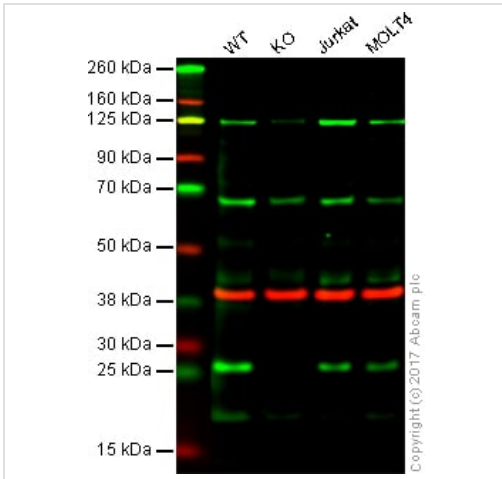
Application	Abreviews	Notes
WB		1/500 - 1/1000. Predicted molecular weight: 25 kDa.
ICC/IF		1/100 - 1/250.
Flow Cyt (Intra)		1/1000. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

**Application notes** Is unsuitable for IHC-P or IP.

## Target

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

## Images



Western blot - Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] (ab91651)

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

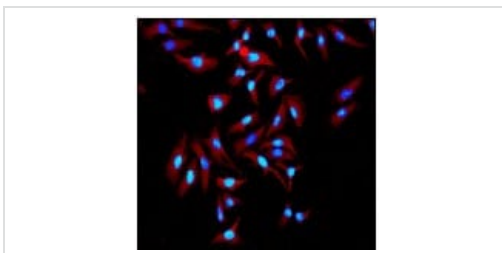
**Lane 2:** TK1 knockout HAP1 whole cell lysate (20 µg)

**Lane 3:** Jurkat whole cell lysate (20 µg)

**Lane 4:** MOLT4 whole cell lysate (20 µg)

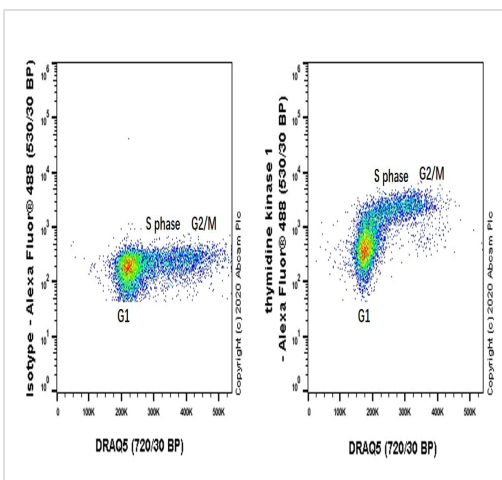
**Lanes 1 - 4:** Merged signal (red and green). Green - ab91651 observed at 25 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

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.



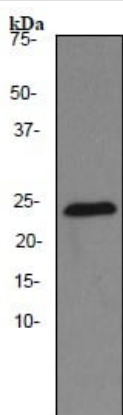
Immunocytochemistry/ Immunofluorescence - Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] (ab91651)

ab91651 at 1/100 dilution staining Thymidine kinase 1/TK1 in HeLa (Human epithelial cell line from cervix adenocarcinoma) cells.



Flow Cytometry (Intracellular) - Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] (ab91651)

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).



Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] (ab91651) at 1/500 dilution + MOLT-4 (Human lymphoblastic leukemia cell line) cell lysate at 10 µg

**Secondary**

HRP labeled goat anti-rabbit at 1/2000 dilution

**Predicted band size: 25 kDa**

Western blot - Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] (ab91651)

Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Thymidine Kinase 1/TK1 antibody [EPR3194] (ab91651)

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

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