


## Product datasheet

# Anti-Glycerol kinase antibody [EPR6567] ab126599

KO VALIDATED Recombinant RabMAB

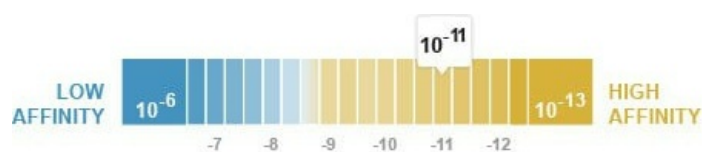
★★★★★ [1 Abreviews](#) [8 References](#) [6 Images](#)

### Overview

<b>Product name</b>	Anti-Glycerol kinase antibody [EPR6567]
<b>Description</b>	Rabbit monoclonal [EPR6567] to Glycerol kinase
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB <b>Unsuitable for:</b> ICC/IF or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide within Human Glycerol kinase aa 450-550. The exact sequence is proprietary.
<b>Positive control</b>	WB: Mouse adipose tissue lysate. Fetal liver, HEK-293T, Jurkat and HepG2 whole cell lysate ( <a href="#">ab7900</a> ). Flow Cyt (intra): Permeabilized HepG2 cells.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> . 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> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 4.80 x 10 <sup>-11</sup> M



[Learn more about K<sub>D</sub>](#)

<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>	EPR6567
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab126599 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

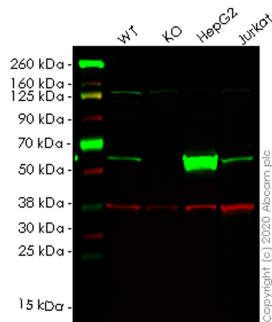
Application	Abreviews	Notes
<b>Flow Cyt (Intra)</b>		1/100 - 1/500. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
<b>WB</b>	★★★★★ (1)	1/1000 - 1/10000. Detects a band of approximately 55 kDa (predicted molecular weight: 61 kDa).

**Application notes** Is unsuitable for ICC/IF or IHC-P.

## Target

<b>Function</b>	Key enzyme in the regulation of glycerol uptake and metabolism.
<b>Tissue specificity</b>	Highly expressed in the liver, kidney and testis. Isoform 2 and isoform 3 are expressed specifically in testis and fetal liver, but not in the adult liver.
<b>Pathway</b>	Polyol metabolism; glycerol degradation via glycerol kinase pathway; sn-glycerol 3-phosphate from glycerol: step 1/1.
<b>Involvement in disease</b>	Defects in GK are the cause of GK deficiency (GKD) [MIM:307030]. This disease can be either symptomatic with episodic metabolic and CNS decompensation or asymptomatic with hyperglycerolemia and hyperglyceroluria only.
<b>Sequence similarities</b>	Belongs to the FGGY kinase family.
<b>Cellular localization</b>	Mitochondrion outer membrane. Cytoplasm. In sperm and fetal tissues, the majority of the enzyme is bound to mitochondria, but in adult tissues, such as liver found in the cytoplasm.

## Images



Western blot - Anti-Glycerol kinase antibody [EPR6567] (ab126599)

**All lanes** : Anti-Glycerol kinase antibody [EPR6567] (ab126599) at 1/500 dilution

**Lane 1** : Wild-type HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 2** : GK knockout HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 3** : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

**Lane 4** : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

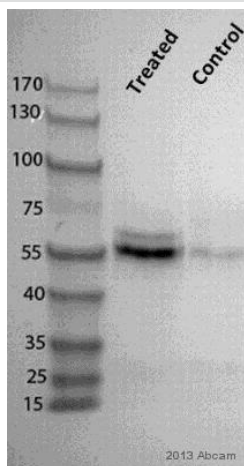
**All lanes** : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

**Predicted band size:** 61 kDa

**Observed band size:** 61 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab126599 observed at 61 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab126599 Anti-Glycerol kinase antibody [EPR6567] was shown to specifically react with Glycerol kinase in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line [ab267328](#) (knockout cell lysate [ab257966](#)) was used. Wild-type and Glycerol kinase knockout samples were subjected to SDS-PAGE. ab126599 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Glycerol kinase antibody [EPR6567] (ab126599)

This image is courtesy of an anonymous Abreview

**All lanes :** Anti-Glycerol kinase antibody [EPR6567] (ab126599) at 1/1000 dilution

**All lanes :** Mouse adipose tissue lysate

Lysates/proteins at 25 µg per lane.

**Secondary**

**All lanes :** HRP-conjugated Donkey anti-rabbit polyclonal at 1/5000 dilution

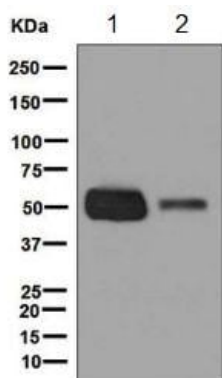
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 61 kDa

**Observed band size:** 55 kDa

**Exposure time:** 5 minutes



Western blot - Anti-Glycerol kinase antibody [EPR6567] (ab126599)

**All lanes :** Anti-Glycerol kinase antibody [EPR6567] (ab126599) at 1/1000 dilution

**Lane 1 :** Fetal liver tissue lysate

**Lane 2 :** HepG2 cell lysate

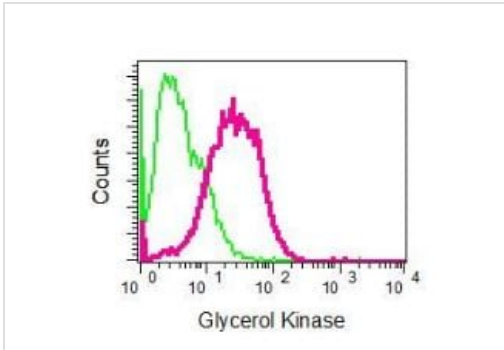
Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** Goat anti-rabbit HRP at 1/2000 dilution

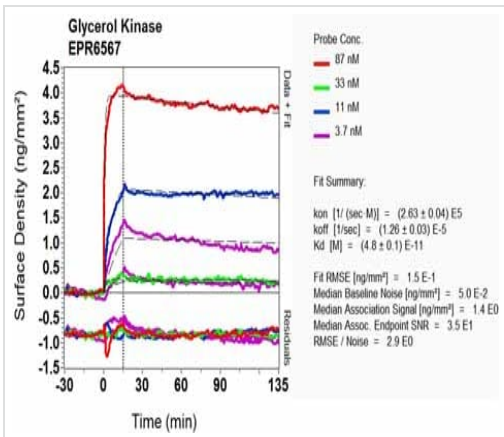
**Predicted band size:** 61 kDa

**Observed band size:** 55 kDa



Flow Cytometry (Intracellular) - Anti-Glycerol kinase antibody [EPR6567] (ab126599)

ab126599, at 1/100 dilution, staining Glycerol kinase in permeabilized HepG2 cells by ImmunoFluorescence (red). A rabbit IgG is used as a negative control (green).



O1-RD Scanning - Anti-Glycerol kinase antibody [EPR6567] (ab126599)

Equilibrium disassociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

### 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-Glycerol kinase antibody [EPR6567]  
(ab126599)

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

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