# abcam

# Product datasheet

# Anti-Triosephosphate isomerase antibody [EPR12149(B)] ab170894



# 2 References 4 Images

#### Overview

Product name Anti-Triosephosphate isomerase antibody [EPR12149(B)]

**Description** Rabbit monoclonal [EPR12149(B)] to Triosephosphate isomerase

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB

Unsuitable for: ICC/IF,IHC-P or IP

Species reactivity Reacts with: Mouse, Rat, Human

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

**Positive control** Fetal liver, HeLa and 293T lysates; 293T cells.

**General notes**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 supplyAnimal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

#### **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: 7.2

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

**Purity** Tissue culture supernatant

**Clonality** Monoclonal

1

Clone number

EPR12149(B)

Isotype

lgG

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab170894 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
Flow Cyt (Intra)		1/10 - 1/100. <b>ab172730</b> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/5000. Predicted molecular weight: 31 kDa.

**Application notes** 

Is unsuitable for ICC/IF,IHC-P or IP.

# **Target**

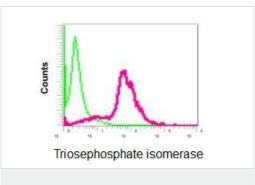
#### Relevance

Triosephosphate isomerase (TIM) catalyses the reversible interconversion of G3P and DHAP. Only G3P can be used in glycolysis, therefore TIM is essential for energy production, allowing two molecules of G3P to be produced for every glucose molecule, thereby doubling the energy yield. Defects in TPI1 are the cause of triosephosphate isomerase deficiency (TPI deficiency) [MIM:190450]. TPI deficiency is an autosomal recessive disorder. It is the most severe clinical disorder of glycolysis. It is associated with neonatal jaundice, chronic hemolytic anemia, progressive neuromuscular dysfunction, cardiomyopathy and increased susceptibility to infection.

# Cellular localization

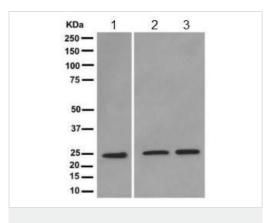
Cytoplasmic and Nuclear; extracellular vesicle exosome; extracellular space.

## **Images**



Flow Cytometry (Intracellular) - Anti-Triosephosphate isomerase antibody [EPR12149(B)] (ab170894)

Intracellular flow cytometric analysis of permeabilized 293T cells labeling Triosephosphate isomerase with ab170894 at 1/10 dilution (red) compared with a rabbit IgG negative control (green).



Western blot - Anti-Triosephosphate isomerase antibody [EPR12149(B)] (ab170894)

3 5 6 7 8 250 kDa --150 kDa -100 kDa -75 kDa -50 kDa ple 37 kDa -25 kDa opyright (C) 2013 20 kDa -15 kDa -10 kDa

Western blot - Anti-Triosephosphate isomerase antibody [EPR12149(B)] (ab170894)

**All lanes :** Anti-Triosephosphate isomerase antibody [EPR12149(B)] (ab170894) at 1/1000 dilution

Lane 1 : Fetal liver lysate
Lane 2 : HeLa cell lysate
Lane 3 : 293T cell lysate

Lysates/proteins at 10 µg per lane.

# Secondary

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

Predicted band size: 31 kDa

**All lanes :** Anti-Triosephosphate isomerase antibody [EPR12149(B)] (ab170894) at 1/1000 dilution

Lane 1 : Mouse brain tissue lysate
Lane 2 : Mouse heart tissue lysate

Lane 3: Mouse kidney tissue lysate

Lane 4: Mouse spleen tissue lysate

Lane 5 : Rat brain tissue lysate
Lane 6 : Rat heart tissue lysate
Lane 7 : Rat kidney tissue lysate

Lane 8: Rat spleen tissue lysate

Lysates/proteins at 20 µg per lane.

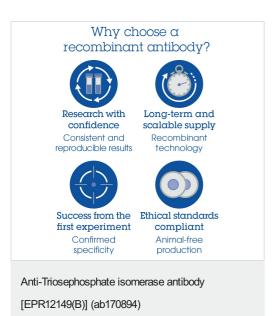
#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

**Predicted band size:** 31 kDa **Observed band size:** 27 kDa

Exposure time: 180 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST



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

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