

## Product datasheet

# Anti-Glucose 6 Phosphate Dehydrogenase antibody [AT2F6] ab91034

★★★★★ [2 Abreviews](#) [2 Images](#)

### Overview

<b>Product name</b>	Anti-Glucose 6 Phosphate Dehydrogenase antibody [AT2F6]
<b>Description</b>	Mouse monoclonal [AT2F6] to Glucose 6 Phosphate Dehydrogenase
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment corresponding to Human Glucose 6 Phosphate Dehydrogenase aa 35-506 (internal sequence). Database link: <a href="#">P11413</a>
<b>Positive control</b>	MCF7 cell lysate ICC/IF: HeLa cells
<b>General notes</b>	<p>This product was changed from ascites to tissue culture supernatant on 11<sup>th</sup> April 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 10% Glycerol
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	AT2F6
<b>Isotype</b>	IgG2b
<b>Light chain type</b>	kappa

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab91034 in the following tested applications.

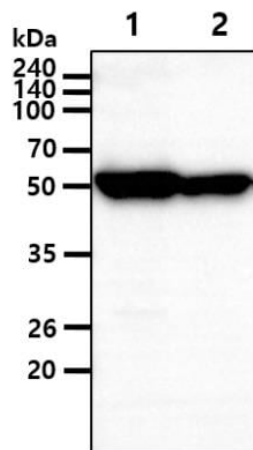
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100.
WB	★★★★★ (2)	1/1000 - 1/2000. Predicted molecular weight: 59 kDa.

## Target

<b>Function</b>	Catalyzes the rate-limiting step of the oxidative pentose-phosphate pathway, which represents a route for the dissimilation of carbohydrates besides glycolysis. The main function of this enzyme is to provide reducing power (NADPH) and pentose phosphates for fatty acid and nucleic acid synthesis.
<b>Tissue specificity</b>	Isoform Long is found in lymphoblasts, granulocytes and sperm.
<b>Pathway</b>	Carbohydrate degradation; pentose phosphate pathway; D-ribulose 5-phosphate from D-glucose 6-phosphate (oxidative stage): step 1/3.
<b>Involvement in disease</b>	Anemia, non-spherocytic hemolytic, due to G6PD deficiency
<b>Sequence similarities</b>	Belongs to the glucose-6-phosphate dehydrogenase family.
<b>Post-translational modifications</b>	Acetylated by ELP3 at Lys-403; acetylation inhibits its homodimerization and enzyme activity. Deacetylated by SIRT2 at Lys-403; deacetylation stimulates its enzyme activity.

## Images



Western blot - Anti-Glucose 6 Phosphate Dehydrogenase antibody [AT2F6] (ab91034)

**All lanes :** Anti-Glucose 6 Phosphate Dehydrogenase antibody [AT2F6] (ab91034) at 1/1000 dilution

**Lane 1 :** MCF7 cell lysate

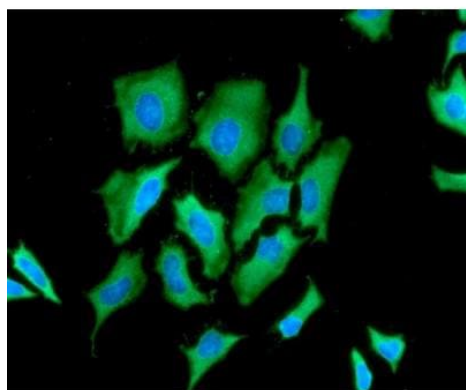
**Lane 2 :** HeLa cell lysate

#### Secondary

**All lanes :** Goat Anti-Mouse HRP conjugated

Developed using the ECL technique.

**Predicted band size:** 59 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Glucose 6 Phosphate Dehydrogenase antibody [AT2F6] (ab91034)

Immunocytochemistry/ Immunofluorescence analysis of HeLa cells labeling Glucose 6 Phosphate Dehydrogenase with ab91034 at 1/100 dilution. The secondary antibody used was Alexa Fluor 488. DAPI was used to stain the cell nucleus (blue).

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

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