


## Product datasheet

# Anti-HPRT antibody ab10479

KO VALIDATED

★★★★★ [4 Abreviews](#) [48 References](#) [6 Images](#)

### Overview

<b>Product name</b>	Anti-HPRT antibody
<b>Description</b>	Rabbit polyclonal to HPRT
<b>Host species</b>	Rabbit
<b>Specificity</b>	Replenishment batches of our polyclonal antibody, ab10479 are tested in WB. Previous batches were additionally validated in ICC/IF. This application is still expected to work and is covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, <a href="#">ab133242</a> .
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Chicken, Gerbil, Chinese hamster 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: MEF1, NIH/3T3, HeLa, MCF-7, HEK-293, A-431, Wild-type HAP1 and PC12 whole cell lysates, mouse brain tissue lysate and Recombinant Human HPRT protein ( <a href="#">ab117153</a> ). ICC/IF: HepG2 cells.
<b>General notes</b>	<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 or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

**Purity** Immunogen affinity purified  
**Clonality** Polyclonal  
**Isotype** IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab10479 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	★★★★★ (4)	Use a concentration of 1 µg/ml. Predicted molecular weight: 24 kDa.
ICC/IF		Use a concentration of 5 µg/ml.

## Target

**Function** Converts guanine to guanosine monophosphate, and hypoxanthine to inosine monophosphate. Transfers the 5-phosphoribosyl group from 5-phosphoribosylpyrophosphate onto the purine. Plays a central role in the generation of purine nucleotides through the purine salvage pathway.

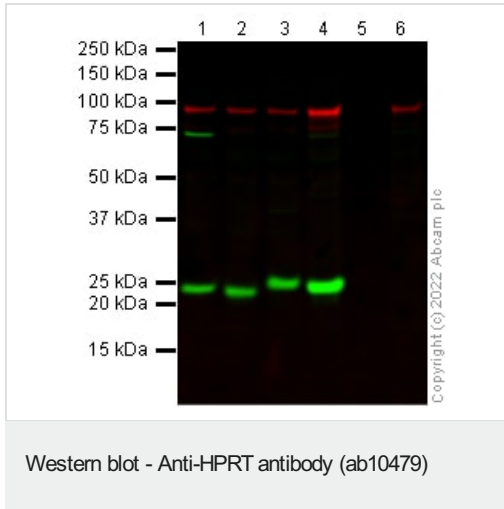
**Pathway** Purine metabolism; IMP biosynthesis via salvage pathway; IMP from hypoxanthine: step 1/1.

**Involvement in disease** Defects in HPRT1 are the cause of Lesch-Nyhan syndrome (LNS) [MIM:300322]. LNS is characterized by complete lack of enzymatic activity that results in hyperuricemia, choreoathetosis, mental retardation, and compulsive self-mutilation. Defects in HPRT1 are the cause of gout HPRT-related (GOUT-HPRT) [MIM:300323]; also known as HPRT-related gout or Kelley-Seegmiller syndrome. Gout is characterized by partial enzyme activity and hyperuricemia.

**Sequence similarities** Belongs to the purine/pyrimidine phosphoribosyltransferase family.

**Cellular localization** Cytoplasm.

## Images



**Lane 1:** HeLa whole cell lysate (20 µg)

**Lane 2:** NIH/3T3 whole cell lysate (20 µg)

**Lane 3:** PC12 whole cell lysate (20 µg)

**Lane 4:** Wild-type HAP1 whole cell lysate (20 µg)

**Lane 5:** Empty Lane

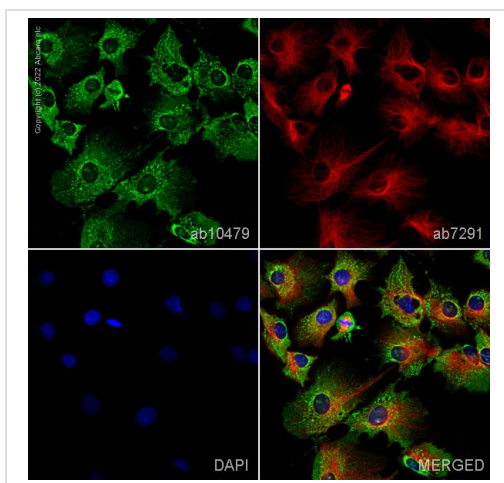
**Lane 6:** HPRT1 knockout HAP1 whole cell lysate (20 µg)

**Lanes 1 - 6:** Merged signal (red and green). Green - ab10479 observed at 24 kDa. Red - loading control **ab6301** observed at 95 kDa.

**Gel type:** MES

**Blocking buffer:** LiCOR blocking buffer

ab10479 was shown to specifically react with HPRT1 in wild-type HAP1 cells. No band was observed when HPRT1 knockout samples were examined. Wild-type and HPRT1 knockout samples were subjected to SDS-PAGE. Ab10479 and Ab6301 (Beta catenin - Loading control) were incubated overnight at 4°C at 1 µg/ml and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800RD) preadsorbed and Goat anti-Mouse IgG H&L (IRDye® 680CW) preadsorbed secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

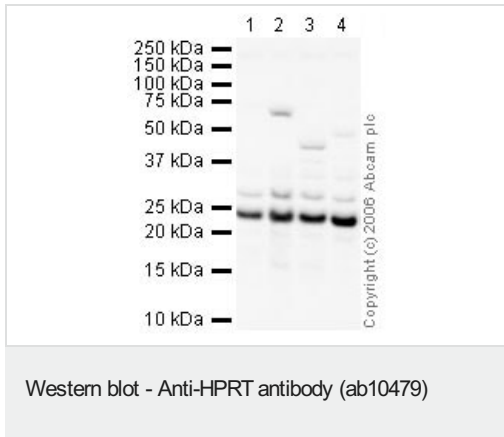


Immunocytochemistry/ Immunofluorescence - Anti-HPRT antibody (ab10479)

ab10479 staining HPRT in HepG2 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab10479 at 5µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal

sections is shown.



**All lanes :** Anti-HPRT antibody (ab10479) at 1 µg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2 :** A-431 whole cell lysate (**ab7909**)

**Lane 3 :** MCF-7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

**Lane 4 :** HEK-293 whole cell lysate (**ab7902**)

Lysates/proteins at 20 µg per lane.

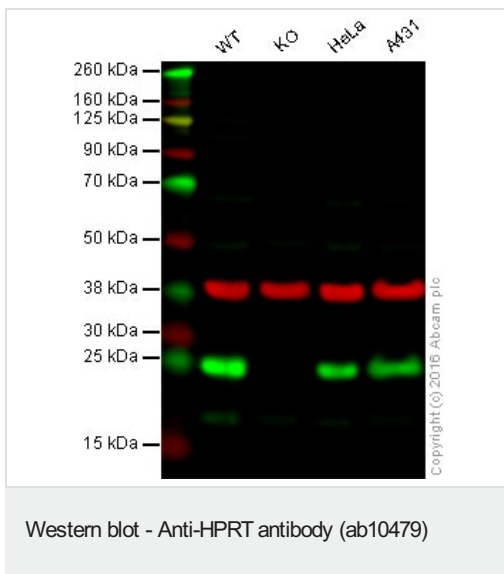
### Secondary

**All lanes :** Goat polyclonal to Rabbit IgG H&L (HRP) Pre-Adsorbed at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 24 kDa

**Observed band size:** 24 kDa



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

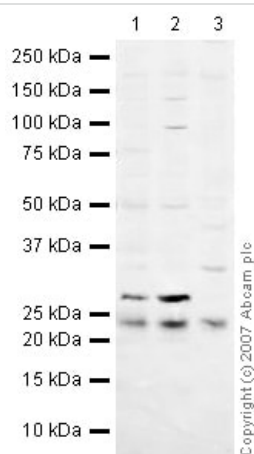
**Lane 2 :** HPRT1 knockout HAP1 whole cell lysate (20 µg)

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

**Lane 4 :** A431 whole cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab10479 observed at 25 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab10479 was shown to specifically react with HPRT1 in wild-type HAP1 cells. No band was observed when HPRT1 knockout samples were examined. Wild-type and HPRT1 knockout samples were subjected to SDS-PAGE. Ab10479 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 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-HPRT antibody (ab10479)

**All lanes :** Anti-HPRT antibody (ab10479) at 1 µg/ml

**Lane 1 :** NIH/3T3 whole cell lysate (**ab7179**)

**Lane 2 :** MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

**Lane 3 :** Brain (Mouse) Tissue Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

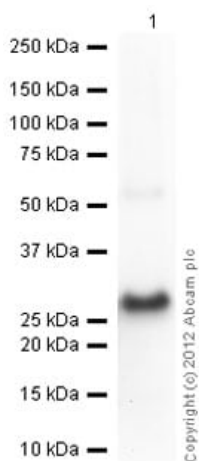
**All lanes :** IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 24 kDa

**Observed band size:** 24 kDa

**Additional bands at:** 28 kDa (possible glycosylated form)



Western blot - Anti-HPRT antibody (ab10479)

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

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