

## Product datasheet

# Anti-Ogg1 antibody [EPR4664(2)] ab124741

**KO VALIDATED** Recombinant RabMAB

★★★★☆ 2 Abreviews 19 References 5 Images

### Overview

<b>Product name</b>	Anti-Ogg1 antibody [EPR4664(2)]
<b>Description</b>	Rabbit monoclonal [EPR4664(2)] to Ogg1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human Ogg1 aa 300 to the C-terminus (C terminal). The exact sequence is proprietary.
<b>Positive control</b>	WB: HeLa, JAR, Raji, NCCIT and HepG2 whole cell lysate ( <a href="#">ab7900</a> ). Human cerebellum tissue lysate.
<b>General notes</b>	<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> <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><b>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</b></p>

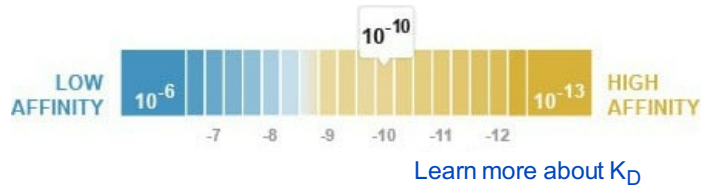
### Properties

<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.

Stable for 12 months at -20°C.

**Dissociation constant (K<sub>D</sub>)**

K<sub>D</sub> = 2.75 x 10<sup>-10</sup> M



**Storage buffer**

pH: 7.2  
Preservative: 0.01% Sodium azide  
Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

**Purity**

Protein A purified

**Clonality**

Monoclonal

**Clone number**

EPR4664(2)

**Isotype**

IgG

**Applications**

**The Abpromise guarantee**

Our [Abpromise guarantee](#) covers the use of ab124741 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	★★★★★ (2)	1/10000 - 1/50000. Detects a band of approximately 39 kDa (predicted molecular weight: 39 kDa).

**Application notes**

Is unsuitable for ICC/IF.

**Target**

**Function**

DNA repair enzyme that incises DNA at 8-oxoG residues. Excises 7,8-dihydro-8-oxoguanine and 2,6-diamino-4-hydroxy-5-N-methylformamidopyrimidine (FAPY) from damaged DNA. Has a beta-lyase activity that nicks DNA 3' to the lesion.

**Tissue specificity**

Ubiquitous.

**Involvement in disease**

Defects in OGG1 may be a cause of renal cell carcinoma (RCC) [MIM:144700]. It is a heterogeneous group of sporadic or hereditary carcinoma derived from cells of the proximal renal tubular epithelium. It is subclassified into clear cell renal carcinoma (non-papillary carcinoma), papillary renal cell carcinoma, chromophobe renal cell carcinoma, collecting duct carcinoma with medullary carcinoma of the kidney, and unclassified renal cell carcinoma.

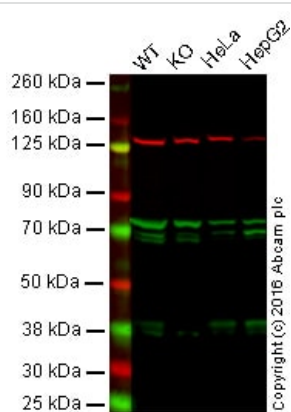
**Sequence similarities**

Belongs to the type-1 OGG1 family.

**Cellular localization**

Mitochondrion; Nucleus and Nucleus > nucleoplasm. Nucleus speckle. Nucleus matrix. Together with APEX1 is recruited to nuclear speckles in UVA-irradiated cells.

**Images**



Western blot - Anti-Ogg1 antibody [EPR4664(2)]  
(ab124741)

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

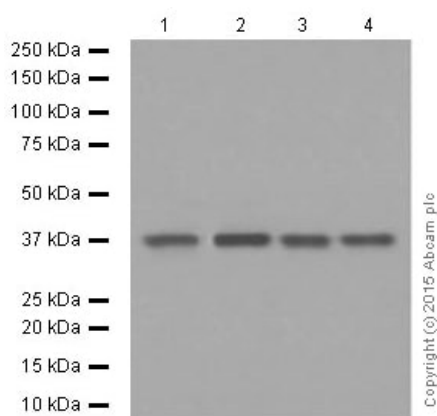
**Lane 2:** Ogg1 knockout HAP1 cell lysate (20 µg)

**Lane 3:** HeLa cell lysate (20 µg)

**Lane 4:** HepG2 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab124741 observed at 38 kDa. Red - loading control, [ab18058](#), observed at 124 kDa.

ab124741 was shown to recognize Ogg1 when Ogg1 knockout samples were used, along with additional cross-reactive bands. Wild-type and Ogg1 knockout samples were subjected to SDS-PAGE. ab124741 and [ab18058](#) (loading control to vinculin) were diluted 1/2000 and 1/10 000 respectively and incubated overnight at 4°C. 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 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Ogg1 antibody [EPR4664(2)]  
(ab124741)

**All lanes :** Anti-Ogg1 antibody [EPR4664(2)] (ab124741) at 1/50000 dilution (purified)

**Lane 1 :** JAR cell lysate

**Lane 2 :** HepG2 cell lysate

**Lane 3 :** Raji cell lysate

**Lane 4 :** NCCIT cell lysate

Lysates/proteins at 20 µg per lane.

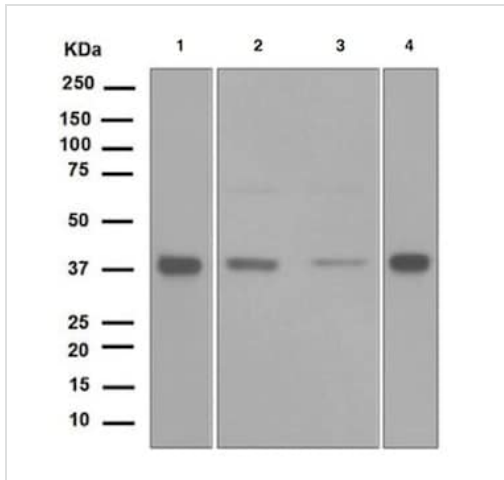
### Secondary

**All lanes :** Peroxidase-conjugated goat anti-rabbit IgG, (H+L) at 1/1000 dilution

**Predicted band size:** 39 kDa

**Observed band size:** 39 kDa

Blocking and dilution buffer: 5% NFDm/TBST.



Western blot - Anti-Ogg1 antibody [EPR4664(2)] (ab124741)

**All lanes** : Anti-Ogg1 antibody [EPR4664(2)] (ab124741) at 1/10000 dilution (unpurified)

**Lane 1** : Human cerebellum tissue lysate

**Lane 2** : HeLa cell lysate

**Lane 3** : JAR cell lysate

**Lane 4** : HepG2 cell lysate

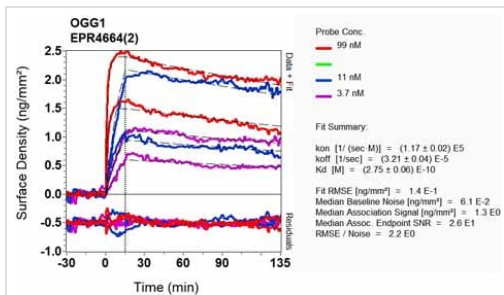
Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

**Predicted band size:** 39 kDa

**Observed band size:** 39 kDa







OI-RD Scanning - Anti-Ogg1 antibody [EPR4664(2)] (ab124741)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

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

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-Ogg1 antibody [EPR4664(2)] (ab124741)

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

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