

## Product datasheet

### Anti-MGMT antibody [EPR4397] ab108630

KO VALIDATED

Recombinant

RabMAb

[12 References](#) [7 Images](#)

#### Overview

|                            |  |
|----------------------------|--|
| <b>Product name</b>        | Anti-MGMT antibody [EPR4397]   |
| <b>Description</b>         | Rabbit monoclonal [EPR4397] to MGMT  |
| <b>Host species</b>        | Rabbit   |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, IHC-P<br><b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human  |
| <b>Immunogen</b>           | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.  |
| <b>Positive control</b>    | WB: MCF7, Jurkat, HeLa, and HT29 cell lysates IHC-P: Human clear cell carcinoma, lung cancer, and spleen tissues   |
| <b>General notes</b>       | <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>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> |

#### 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>Storage buffer</b>       | pH: 7.20<br>Preservative: 0.01% Sodium azide<br>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| <b>Purity</b>               | Protein A purified   |
| <b>Clonality</b>            | Monoclonal   |

Clone number                      EPR4397

Isotype                                IgG

## Applications

**The Abpromise guarantee**                      Our **Abpromise guarantee** covers the use of ab108630 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          |           | 1/1000 - 1/10000. Detects a band of approximately 23 kDa (predicted molecular weight: 22 kDa).  |
| IHC-P       |           | 1/800. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended. See <a href="#">IHC antigen retrieval protocols</a> .<br><br><b>For unpurified use at 1/250- 1/500.</b> |

**Application notes**                                      Is unsuitable for Flow Cyt, ICC/IF or IP.

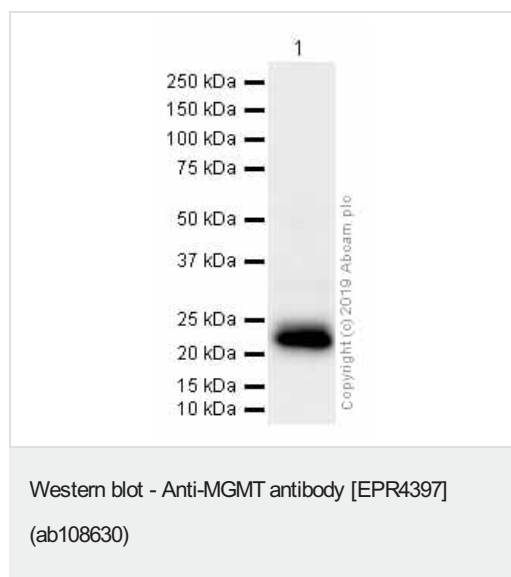
## Target

**Function**    Involved in the cellular defense against the biological effects of O6-methylguanine (O6-MeG) in DNA. Repairs alkylated guanine in DNA by stoichiometrically transferring the alkyl group at the O-6 position to a cysteine residue in the enzyme. This is a suicide reaction: the enzyme is irreversibly inactivated.

**Sequence similarities**                                      Belongs to the MGMT family.

**Cellular localization**                                      Nucleus.

## Images



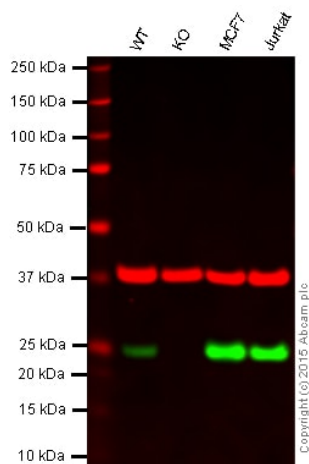
Anti-MGMT antibody [EPR4397] (ab108630) at 1/5000 dilution  
(Purified) + MCF7 (Human breast adenocarcinoma epithelial cell)  
whole cell lysates at 15 µg

### Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 22 kDa

**Observed band size:** 22 kDa



Western blot - Anti-MGMT antibody [EPR4397]  
(ab108630)

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

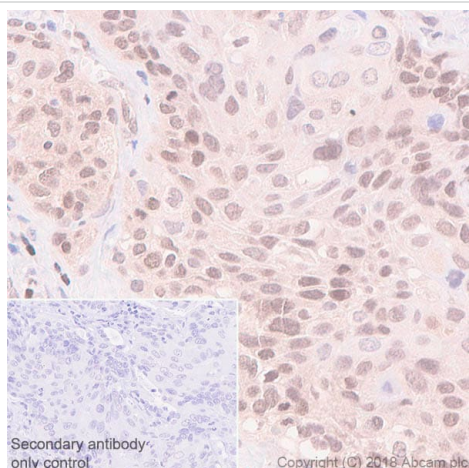
**Lane 2:** MGMT knockout HAP1 cell lysate (20 µg)

**Lane 3:** MCF7 cell lysate (20 µg)

**Lane 4:** Jurkat cell lysate (20 µg)

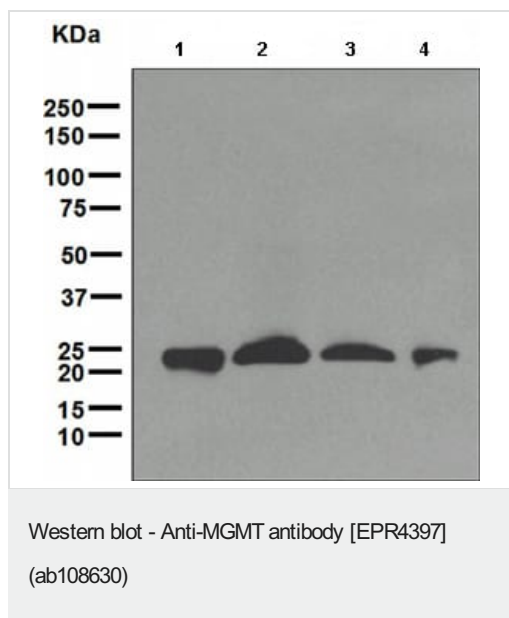
**Lanes 1 - 4:** Merged signal (red and green). Green - unpurified ab108630 observed at 22 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab108630 was shown to specifically react with MGMT when MGMT knockout samples were used. Wild-type and MGMT knockout samples were subjected to SDS-PAGE. ab108630 and **ab8245** (loading control to GAPDH) were diluted 1/1000 and 1/2000 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 1/10 000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MGMT antibody [EPR4397] (ab108630)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung cancer tissue sections labeling MGMT with purified ab108630 at 1:800 dilution (0.94 µg/ml). Heat mediated antigen retrieval was performed using Citrate buffer, pH 6.0. ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



**All lanes :** Anti-MGMT antibody [EPR4397] (ab108630) at 1/1000 dilution (Unpurified)

**Lane 1 :** MCF7 cell lysate

**Lane 2 :** Jurkat cell lysate

**Lane 3 :** HeLa cell lysate

**Lane 4 :** HT29 cell lysate

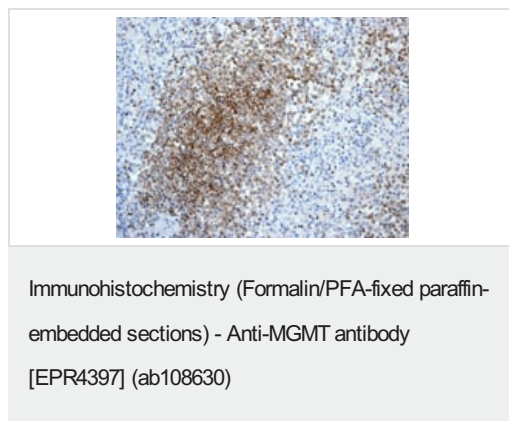
Lysates/proteins at 10 µg per lane.

**Predicted band size:** 22 kDa

**Observed band size:** 23 kDa







Unpurified ab108630, at a 1/250 dilution, staining MGMT in paraffin embedded Human clear cell carcinoma tissue by Immunohistochemistry.



Unpurified ab108630, at a 1/250 dilution, staining MGMT in paraffin embedded Human spleen tissue by Immunohistochemistry.

Why choose a recombinant antibody?

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

Anti-MGMT antibody [EPR4397] (ab108630)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors