# abcam

## Product datasheet

## Anti-MGMT antibody [EPR4398] ab108989



Recombinant RobMAb

## 5 Images

#### Overview

**Product name** Anti-MGMT antibody [EPR4398]

**Description** Rabbit monoclonal [EPR4398] to MGMT

**Host species** Rabbit

**Tested applications** Suitable for: WB, IP

Unsuitable for: ICC/IF or IHC-P

Reacts with: Human Species reactivity

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

Positive control MCF7 and Jurkat cell lysates

**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 supply

- Animal-free production

For more information see here.

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

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

#### **Properties**

Liquid **Form** 

Storage instructions 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.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

Protein A purified **Purity** 

Clonality Monoclonal

Clone number EPR4398

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise quarantee covers the use of ab108989 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).
IP		1/10 - 1/100.

**Application notes** 

Is unsuitable for ICC/IF or IHC-P.

#### **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-

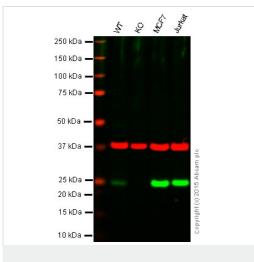
6 position to a cysteine residue in the enzyme. This is a suicide reaction: the enzyme is

irreversibly inactivated.

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

Cellular localization Nucleus.

## **Images**



Western blot - Anti-MGMT antibody [EPR4398] (ab108989)

**Lane 1**: Wild-type HAP1 cell lysate (20  $\mu$ g)

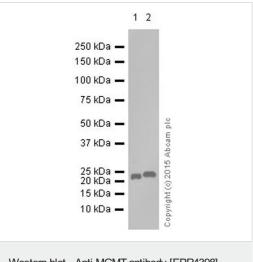
Lane 2: MGMT knockout HAP1 cell lysate (20 µg)

Lane 3: MCF7 cell lysate (20 µg)

Lane 4: Jurkat cell lysate (20 µg)

**Lanes 1 - 4**: Merged signal (red and green). Green - ab108989 observed at 22 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab108989 was shown to specifically react with MGMT when MGMT knockout samples were used. Wild-type and MGMT knockout samples were subjected to SDS-PAGE. ab108989 and <u>ab8245</u> (loading control to MGMT) 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 (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-MGMT antibody [EPR4398]

(ab108989)

All lanes: Anti-MGMT antibody [EPR4398] (ab108989) at 1/1000 dilution (purified)

Lane 1: MCF7 cell lysate Lane 2: Jurkat cell lysate

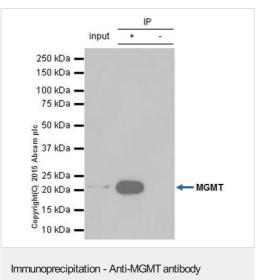
Lysates/proteins at 10 µg per lane.

#### **Secondary**

All lanes: HRP goat anti-rabbit lgG (H+L) at 1/20000 dilution

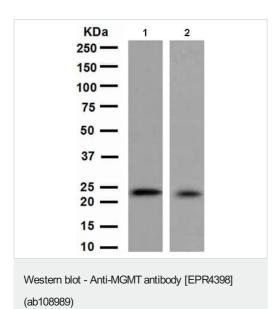
Predicted band size: 22 kDa Observed band size: 23 kDa

Blocking buffer: 5% NFDM/TBST Dilution buffer: 5% NFDM/TBST



[EPR4398] (ab108989)

ab108989 (purified) at 1/30 immunoprecipitating MGMT in 10  $\mu$ g MCF7 (Lanes 1 and 2, observed at 23 kDa). Lane 3 - PBS. For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10,000 dilution. Blocking buffer and concentration: 5% NFDM/TBST Dilution buffer and concentration: 5% NFDM/TBST



**All lanes :** Anti-MGMT antibody [EPR4398] (ab108989) at 1/1000 dilution (unpurified)

Lane 1 : MCF7 cell lysate

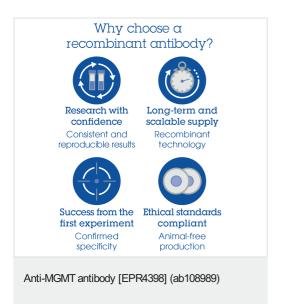
Lane 2 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

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

**Predicted band size:** 22 kDa **Observed band size:** 23 kDa



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

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