

**MGMT Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12883a****Specification**

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**MGMT Antibody (N-term) - Product Information**

Application	<b>WB, FC,E</b>
Primary Accession	<a href="#">P16455</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>21646</b>
Antigen Region	<b>1-30</b>

**MGMT Antibody (N-term) - Additional Information****Gene ID** 4255**Other Names**

Methylated-DNA--protein-cysteine methyltransferase, 6-O-methylguanine-DNA methyltransferase, MGMT, O-6-methylguanine-DNA-alkyltransferase, MGMT

**Target/Specificity**

This MGMT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human MGMT.

**Dilution**

WB~~1:1000

FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MGMT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MGMT Antibody (N-term) - Protein Information****Name** MGMT**Function** Involved in the cellular defense against the biological effects of O6-methylguanine

(O6-MeG) and O4-methylthymine (O4-MeT) in DNA. Repairs the methylated nucleobase in DNA by stoichiometrically transferring the methyl group to a cysteine residue in the enzyme. This is a suicide reaction: the enzyme is irreversibly inactivated.

#### Cellular Location

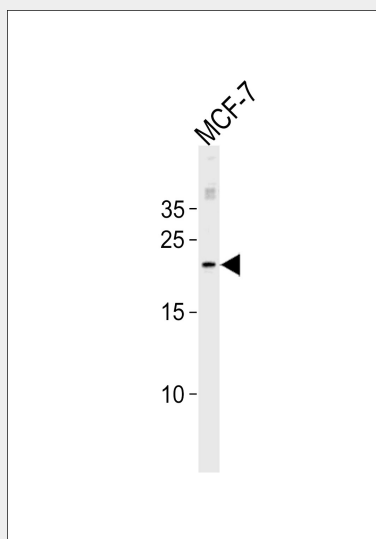
Nucleus.

#### MGMT Antibody (N-term) - Protocols

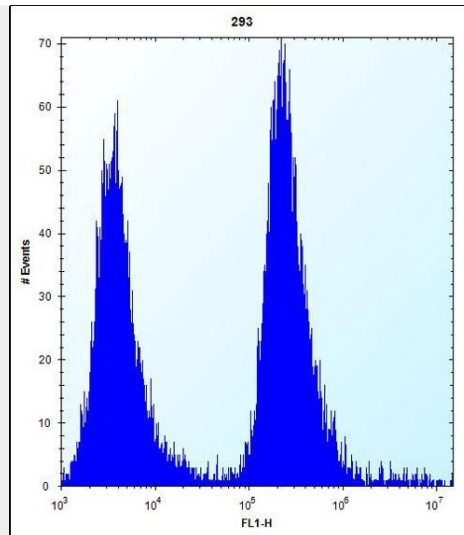
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### MGMT Antibody (N-term) - Images



MGMT Antibody (N-term) (Cat. #AP12883a) western blot analysis in MCF-7 cell line lysates (35ug/lane). This demonstrates the MGMT antibody detected the MGMT protein (arrow).



MGMT Antibody (N-term) (Cat. #AP12883a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **MGMT Antibody (N-term) - Background**

MGMT is 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.

#### **MGMT Antibody (N-term) - References**

- Svrcek, M., et al. Gut 59(11):1516-1526(2010)
- Palli, D., et al. Mutagenesis 25(6):569-575(2010)
- Kim, M., et al. Cancer Sci. 101(11):2436-2442(2010)
- Mangoni, M., et al. Int. J. Radiat. Oncol. Biol. Phys. (2010) In press :
- Jacob, R., et al. Anticancer Res. 30(7):2561-2566(2010)