

# MGMT Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12883a

## Product Information

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

## Additional Information

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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	FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
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.

## Protein Information

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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.

## Background

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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.

## References

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Svrcek, M., et al. Gut 59(11):1516-1526(2010)

Palli, D., et al. Mutagenesis 25(6):569-575(2010)

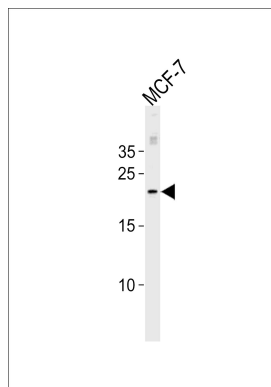
Kim, M., et al. Cancer Sci. 101(11):2436-2442(2010)

Mangoni, M., et al. Int. J. Radiat. Oncol. Biol. Phys. (2010) In press :

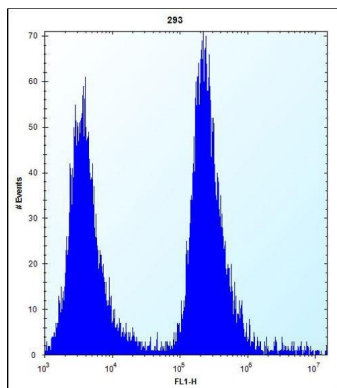
Jacob, R., et al. Anticancer Res. 30(7):2561-2566(2010)

## Images

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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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.