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MGMT Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7341b

Specification

MGMT Antibody (C-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P16455
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**156-182**

MGMT Antibody (C-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 156-182 amino acids from the C-terminal region of human MGMT.

Dilution
WB~~1:1000
IHC-P~~1:50~100
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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MGMT Antibody (C-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.

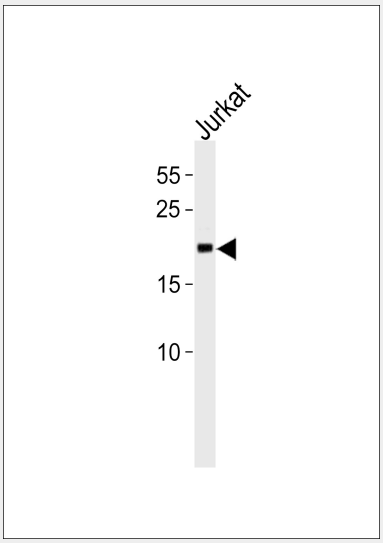
Cellular Location
Nucleus.

MGMT Antibody (C-term) - Protocols

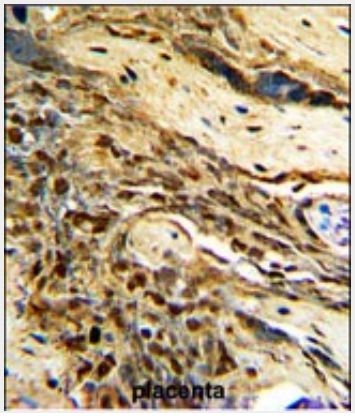
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

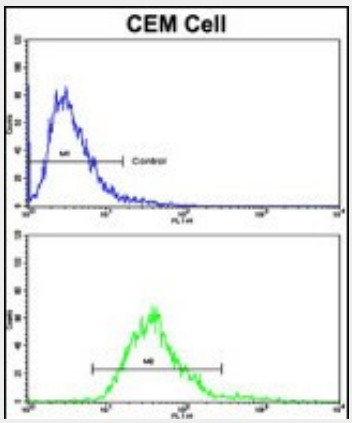
MGMT Antibody (C-term) - Images



MGMT Antibody (C-term) (Cat. #AP7341b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the MGMT antibody detected the MGMT protein (arrow).



Formalin-fixed and paraffin-embedded human placenta with MGMT Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of CEM cells using MGMT Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MGMT Antibody (C-term) - Background

MGMT is involved in the cellular defense against the biological effects of O6-methylguanine (O6-MeG) in DNA. This protein 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 protein is irreversibly inactivated.

MGMT Antibody (C-term) - References

Kim,J.I., Suh,J.T. Hum. Pathol. 40 (7), 934-941 (2009)
Chen,S.P., Chiu,S.C. Genet Test Mol Biomarkers 13 (1), 67-71 (2009)
Slupphaug,G., Lettrem,I. Carcinogenesis 13 (10), 1769-1773 (1992)
Lee,S.M., Crowther,D. Br. J. Cancer 66 (2), 331-336 (1992)

MGMT Antibody (C-term) - Citations

- Impact of O6-methylguanine-DNA methyltransferase expression on the drug resistance of clear cell renal cell carcinoma.
- High-mobility group box 2 is associated with prognosis of glioblastoma by promoting cell viability, invasion, and chemotherapeutic resistance.