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MGMT Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8481b

Specification

MGMT Antibody - Product Information

Application	**WB, FC,E**
Primary Accession	P16455
Reactivity	**Human**
Host	**Mouse**
Clonality	**monoclonal**
Isotype	**IgG1,k**
Calculated MW	**21646**

MGMT Antibody - 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 a mouse immunized with a recombinant protein.

Dilution
WB~~1:1000-1:2000
FC~~1:25

Format
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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 is for research use only and not for use in diagnostic or therapeutic procedures.

MGMT Antibody - 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.

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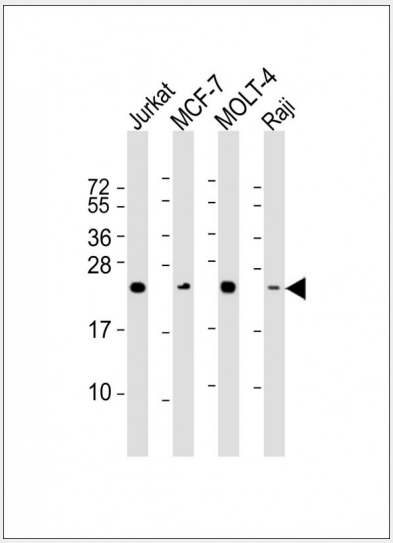
Cellular Location
Nucleus.

MGMT Antibody - Protocols

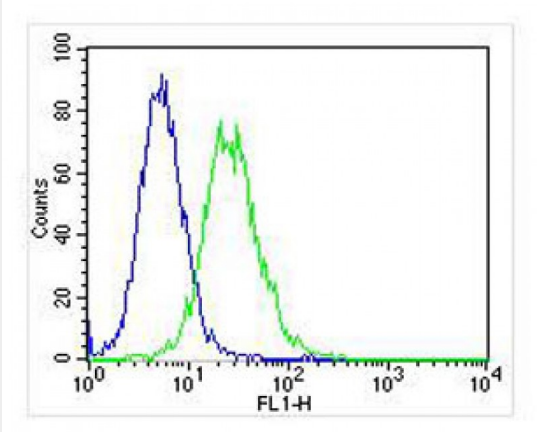
Provided below are standard protocols that you may find useful for product applications.

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

MGMT Antibody - Images



All lanes : Anti-MGMT Antibody at1:1000-1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: MOLT-4 whole cell lysate Lane 4: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing Jurkat cells stained with AM8481b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8481b, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NA168821)) at 1/400 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was mouse IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

MGMT Antibody - Background

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 - References

Tano K.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:686-690(1990).
Rydberg B.,et al.J. Biol. Chem. 265:9563-9569(1990).
Koike G.,et al.J. Biol. Chem. 265:14754-14762(1990).
Hayakawa H.,et al.J. Mol. Biol. 213:739-747(1990).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.