

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.

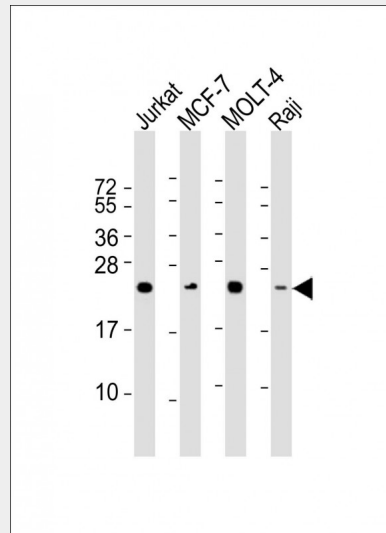
Cellular Location

Nucleus.

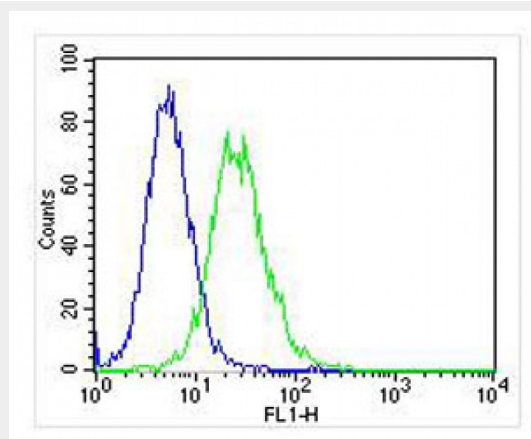
MGMT Antibody - Protocols

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

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

MGMT Antibody - Images

All lanes : Anti-MGMT Antibody at 1:1000-1:2000 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% NFDN/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 incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8481b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NA168821) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was mouse IgG (1µg/1x10⁶ 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).
Kalnina N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.