

MGMT Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5643

Specification

MGMT Antibody - Product Information

Application	WB, FC,E
Primary Accession	P16455
Other Accession	B4DEE8
Reactivity	Human
Predicted	Monkey
Host	Mouse
Clonality	Monoclonal
Calculated MW	H=22;R=22;M=22 KDa
Isotype	IgG1,k
Antigen Source	HUMAN

MGMT Antibody - Additional Information

Gene ID 4255

Antigen Region
1-207

Other Names

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

Dilution

WB~~1:2000
FC~~1:25

Target/Specificity

This MGMT antibody is generated from a mouse immunized with a recombinant protein.

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.

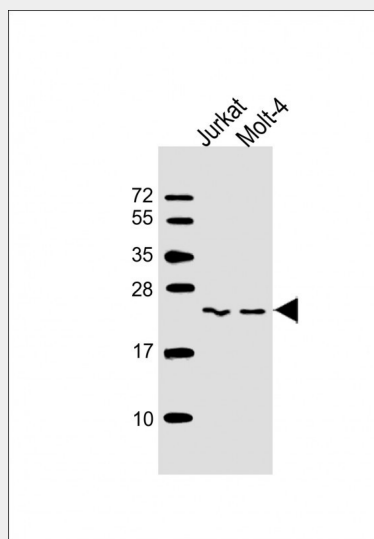
Cellular Location
Nucleus.

MGMT Antibody - Protocols

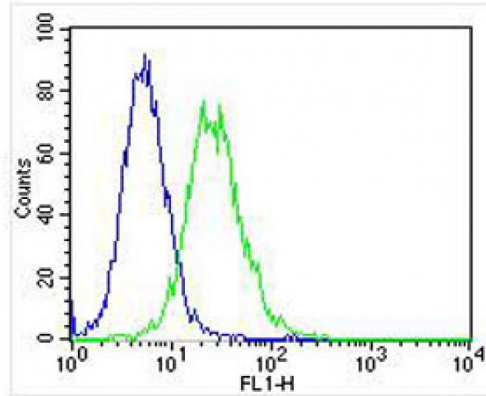
Provided below are standard protocols that you may find useful for product applications.

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

MGMT Antibody - Images



All lanes : Anti-MGMT Antibody at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: Molt-4 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 AW5643 (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 (AW5643, 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.