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MGMT Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM2217b

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P16455
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	888CT22.2.4
Calculated MW	21646

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	Purified His-tagged MGMT protein was used to produced this monoclonal antibody.
Dilution	WB~~1:1000 IHC-P~~1:100 IF~~1:25 E~~Use at an assay dependent concentration.
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.

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.

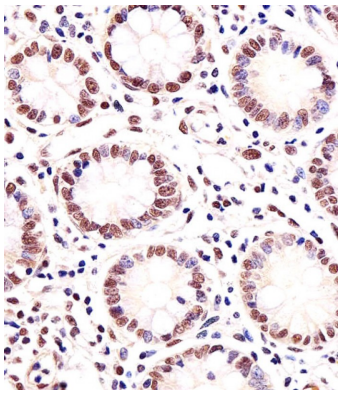
Background

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.

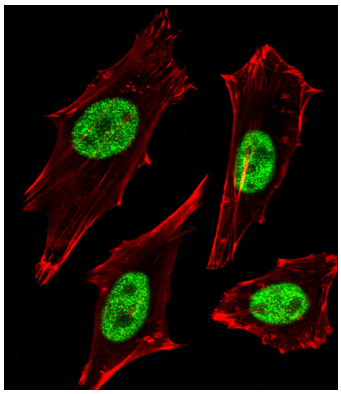
References

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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).

Images

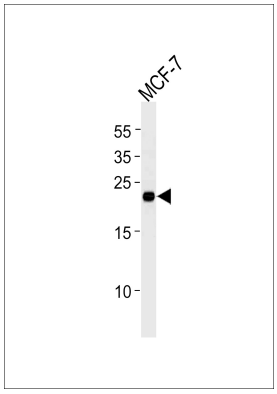


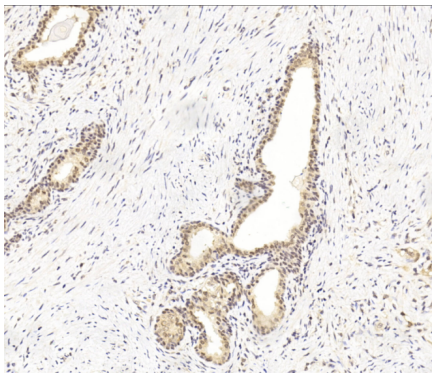
Immunohistochemical analysis of paraffin-embedded H. small intestine section using MGMT Antibody(Cat#AM2217B). AM2217B was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Fluorescent image of Hela cells stained with MGMT Antibody(Cat#AM2217B). AM2217B was diluted at 1:25 dilution. An Alexa Fluor® 488-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).

MGMT Antibody(Cat. #AM2217b) western blot analysis in MCF-7 cell line lysates (35µg/lane).This demonstrates the MGMT antibody detected the MGMT protein (arrow).





Immunohistochemical analysis of paraffin-embedded Human Prostate cancer section using Pink1(Cat#AM2217b). AM2217b was diluted at 1:100 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

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