

MGMT Rabbit pAb

Catalog # AP99096

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P16455
Other Accession	P16455
Reactivity	Rat
Predicted	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21646
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MGMT
Epitope Specificity	101-207/207
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the MGMT family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	MGMT (O6 methylguanine DNA methyltransferase) is an enzyme that transfers methyl groups from O(6) methylguanine, and other methylated moities of DNA, to a cysteine residue in itself, thus repairing DNA damage caused by alkylation in a single step reaction. This is a suicide reaction as the enzyme is irreversibly inactivated. MGMT prevents mutagenesis and malignant transformation, and also provides resistance to chemotherapy with alkylating agents among cancer patients.

Additional Information

Gene ID	4255
Other Names	MGMT_HUMAN; MGMT; 6-O-methylguanine-DNA methyltransferase (MGMT); O-6-methylguanine-DNA-alkyltransferase; 2.1.1.63; O-6-methylguanine-DNA methyltransferase; methylated-DNA--protein-cysteine methyltransferase
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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