

Anti-MGMT Antibody
Catalog # ABO10731**Specification**

Anti-MGMT Antibody - Product Information

Application	WB
Primary Accession	P16455
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Methylated-DNA--protein-cysteine methyltransferase(MGMT) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MGMT Antibody - Additional Information

Gene ID 4255

Other Names

Methylated-DNA--protein-cysteine methyltransferase, 2.1.1.63, 6-O-methylguanine-DNA methyltransferase, MGMT, O-6-methylguanine-DNA-alkyltransferase, MGMT

Calculated MW

21646 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Nucleus.

Protein Name

Methylated-DNA--protein-cysteine methyltransferase

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human MGMT(87-101aa PVFQQESFTRQVLWK), different from the related rat and mouse sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-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

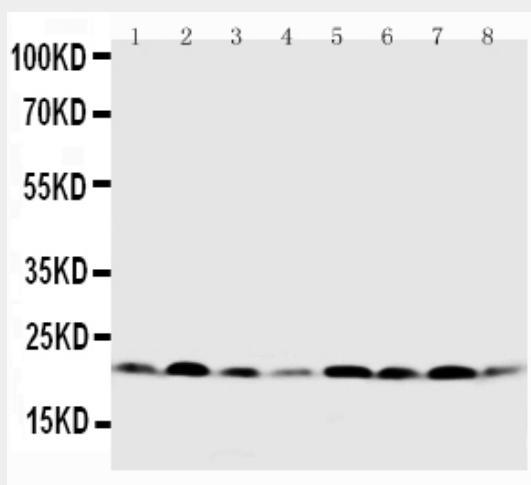
Nucleus.

Anti-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](#)

Anti-MGMT Antibody - Images



Anti-MGMT antibody, ABO10731, Western blotting Lane 1: Rat Brain Tissue Lysate Lane 2: Rat

Liver Tissue Lysate Lane 3: Rat Spleen Tissue Lysate Lane 4: Rat Thymus Tissue Lysate Lane 5:
MCF-7 Cell Lysate Lane 6: HELA Cell Lysate Lane 7: JURKAT Cell Lysate Lane 8: RAJI Cell Lysate

Anti-MGMT Antibody - Background

Methylated-DNA-protein-cysteine methyltransferase (MGMT) is an enzyme that in humans is encoded by the MGMT gene. O(6)-alkylguanine is the major mutagenic and carcinogenic lesion in DNA induced by simple alkylating mutagens. MGMT gene is mapped to chromosome 10. Rydberg et al. (1990) concluded that the methyltransferase gene spans at least 15 kb. Gardner et al. (1991) refined the localization of the gene to 10q24.33-qter. Methylation of the gene's promoter plays a significant role in carcinogenesis.