

For Research Use Only

MGMT Monoclonal antibody

Catalog Number: 67476-1-Ig

Featured Product

2 Publications



Basic Information

Catalog Number:

67476-1-Ig

Size:

1000 μ g/ml

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG29936

GenBank Accession Number:

BC000824

GeneID (NCBI):

4255

UNIPROT ID:

P16455

Full Name:

O-6-methylguanine-DNA
methyltransferase

Calculated MW:

22 kDa

Observed MW:

22 kDa

Purification Method:

Protein A purification

CloneNo.:

1H2C9

Recommended Dilutions:

WB 1:5000-1:50000

IF 1:50-1:500

Applications

Tested Applications:

FC, IF/ICC, WB, ELISA

Cited Applications:

IF

Species Specificity:

Human

Cited Species:

human, mouse

Positive Controls:

WB : U2OS cells, HeLa cells, HepG2 cells, LNCaP cells,
Jurkat cells, A549 cells, MCF-7 cells, MOLT-4 cells, NK-
92 cells, Raji cells

IF : HepG2 cells,

Background Information

MGMT is the primary vehicle for cellular removal of alkyl lesions from the O-6 position of guanine and the O-4 position of thymine. While key to the maintenance of genomic integrity, MGMT also removes damage induced by alkylating chemotherapies, inhibiting the efficacy of cancer treatment [PMID:23065697].MGMT is the primary mechanism for the removal of alkylation damage from the O-6 position of guanine [PMID: 17482892]. The O-6 position of guanine is one of several positions in DNA bases to which alkyl groups are attached in SN1 alkylation reactions, and this repair has been well-characterized in mammalian cells and via MGMT homologs in bacteria and Archaea.[PMID: 10767620]

Notable Publications

Author	Pubmed ID	Journal	Application
Mingming Yang	35648484	Nucleic Acids Res	IF
Zengpanpan Ye	36649564	Cancer Discov	IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

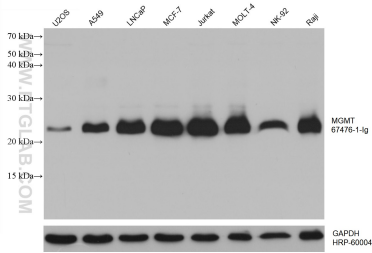
T: 4006900926

E: Proteintech-CN@ptglab.com

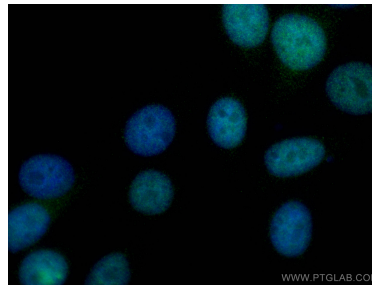
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

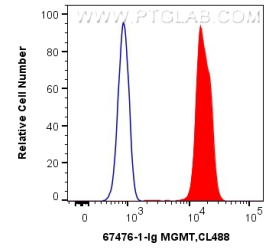
Selected Validation Data



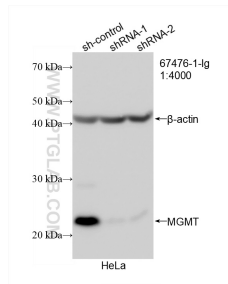
Various lysates were subjected to SDS PAGE followed by western blot with 67476-1-Ig (MGMT antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MGMT antibody (67476-1-Ig, Clone: 1H2C9) at dilution of 1:100 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1×10^6 Jurkat cells were intracellularly stained with 0.4 ug Anti-Human MGMT (67476-1-Ig, Clone: 1H2C9) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



WB result of MGMT antibody (67476-1-Ig; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MGMT transfected HeLa cells.