For Research Use Only

MGMT Monoclonal antibody, PBS Only



Catalog Number:67476-1-PBS

Featured Product

Basic Information

Catalog Number: 67476-1-PBS Size: 1mg/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

Applications

Tested Applications: Indirect ELISA, IF/ICC, WB Species Specificity: human

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]

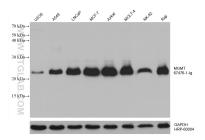
Storage

Storage: Store at -80°C. The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer: PBS Only

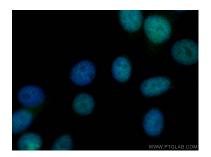
For technical support and original validation data for this product please contact:T: 4006900926E: Proteintech-CN@ptglab.comW: ptgcn.com

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

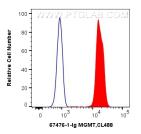
Selected Validation Data



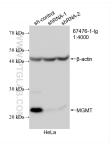
Various lysates were subjected to SDS PAGE followed by western blot with 67476-1-Ig (MGMT antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 67476-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MGMT antibody (67476-1-1g, Clone: 1H2C9) at dilution of 1:100 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67476-1-PBS in a different storage buffer formulation.



1X10^6 Jurkat cells were intracellularly stained with 0.4 ug Anti-Human MGMT (67476-1-1g, Clone:1H2C9) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgC(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). This data was developed using the same antibody clone with 67476-1-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 67476-1-PBS in a different storage buffer formulation.