

For Research Use Only

MGMT Polyclonal antibody

Catalog Number: 17195-1-AP

Featured Product

21 Publications



Basic Information

Catalog Number:

17195-1-AP

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop and 340 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG9996

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:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:6000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, CoIP

Species Specificity:

human

Cited Species:

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: Jurkat cells, MCF-7 cells, HeLa cells, Raji cells

IP: Jurkat cells,

IHC: human liver cancer tissue, human placenta tissue, human spleen tissue, human testis tissue

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
Wenbing Shangguan	31680769	Korean J Physiol Pharmacol	WB
Jianlong Li	27894350	J Exp Clin Cancer Res	WB
Jiawei Luo	36319884	Int Ophthalmol	WB,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

*** 20ul sizes contain 0.1% BSA

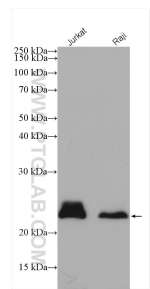
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

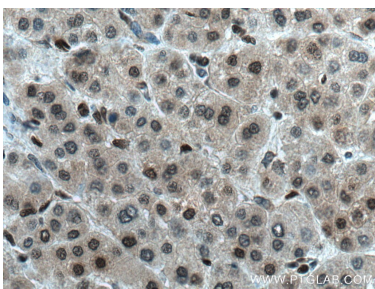
E: proteintech@ptglab.com
W: ptglab.com

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

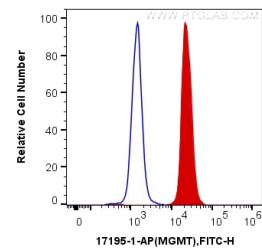
Selected Validation Data



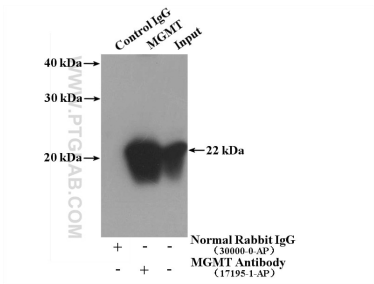
Various lysates were subjected to SDS PAGE followed by western blot with 17195-1-AP (MGMT antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



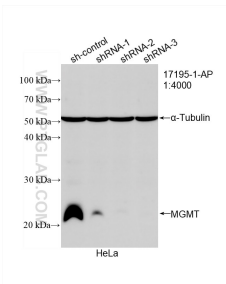
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 17195-1-AP (MGMT antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ Jurkat cells were intracellularly stained with 0.2 ug Anti-Human MGMT (17195-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



IP result of anti-MGMT (IP:17195-1-AP, 4ug; Detection:17195-1-AP 1:500) with Jurkat cells lysate 3200ug.



WB result of MGMT antibody (17195-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MGMT transfected HeLa cells.