

For Research Use Only

MGMT Polyclonal antibody

Catalog Number: 17195-1-AP

Featured Product

20 Publications



Basic Information

Catalog Number:

17195-1-AP

Size:

150ul, Concentration: 1000 µg/ml by Nanodrop and 340 µg/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:

FC, IHC, IP, WB, ELISA

Cited Applications:

CoIP, IF, IHC, WB

Species Specificity:

human

Cited Species:

human

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

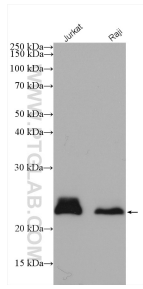
For technical support and original validation data for this product please contact:

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

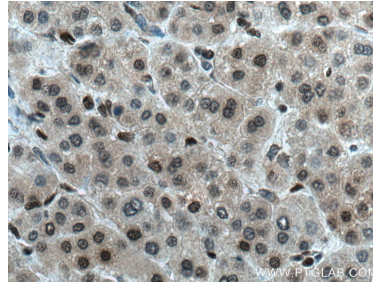
E: proteintech@ptglab.com
W: ptglab.com

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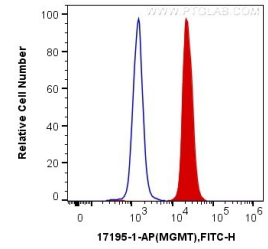
Selected Validation Data



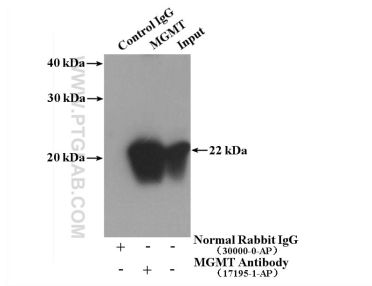
Various lysates were subjected to SDS PAGE followed by western blot with 17195-1-AP (MGMT antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



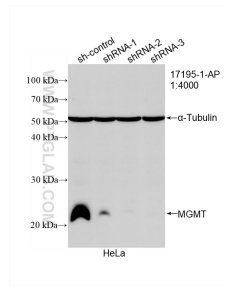
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 17195-1-AP (MGMT antibody) at dilution of 1:200 (under 40x Lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1×10^6 Jurkat cells were intracellularly stained with 0.2 ug Anti-Human MGMT (17195-1-AP) and CoraLite@488-Conjugated AffiniPure 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.