

For Research Use Only

MGMT Recombinant antibody

Catalog Number: 86115-5-RR



Basic Information

Catalog Number: 86115-5-RR	GenBank Accession Number: BC000824	Purification Method: Protein A purification
Concentration: 1000 µg/ml	GeneID (NCBI): 4255	CloneNo.: 243130G10
Source: Rabbit	UNIPROT ID: P16455	Recommended Dilutions: WB: 1:2000-1:10000 IHC: 1:500-1:2000 IF/ICC: 1:400-1:1600
Isotype: IgG	Full Name: O-6-methylguanine-DNA methyltransferase	
Immunogen Catalog Number: AG9996	Calculated MW: 22 kDa	
	Observed MW: 22 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls:
Species Specificity: human	WB: Jurkat cells, MCF-7 cells, Raji cells, HeLa cells, HepG2 cells, LNCaP cells
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC: human lung cancer tissue,
	IF/ICC: MCF-7 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).

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

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

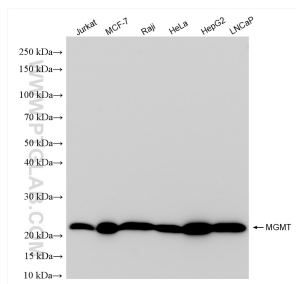
T: 4006900926

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W: ptgcn.com

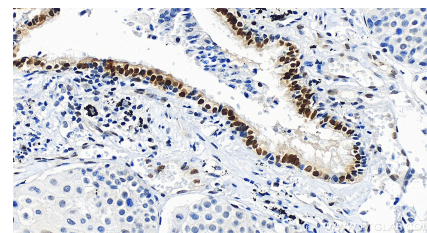
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Selected Validation Data

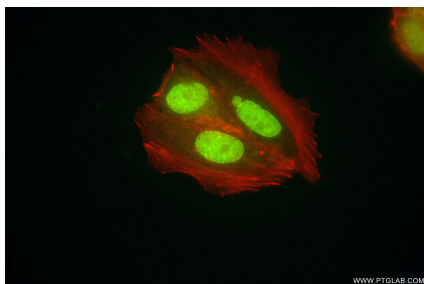


Various lysates were subjected to SDS PAGE followed by western blot with 89933-4-RR (MGMT antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 86115-5-RR (MGMT antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 86115-5-RR (MGMT antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using MGMT antibody (89933-4-RR, Clone: 243130G10) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).