For Research Use Only

## MGMT Recombinant antibody, PBS Only

Catalog Number:86115-5-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

243130G10

**Basic Information** 

Catalog Number: 86115-5-PBS

Concentration: 1 mg/ml

BC000824 GeneID (NCBI): 4255

GenBank Accession Number:

Source: **UNIPROT ID:** Rabbit P16455 Full Name: Isotype: O-6-methylguanine-DNA

methyltransferase Immunogen Catalog Number: AG9996

22 kDa

Observed MW: 22 kDa

Calculated MW:

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, Indirect ELISA

Species Specificity:

## **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

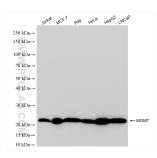
Storage:

Store at -80°C.

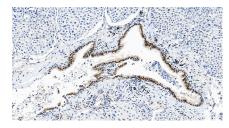
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

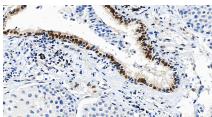
## Selected Validation Data



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. This data was developed using the same antibody clone with 86115-5-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded 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). This data was developed using the same antibody clone with 86115-5-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded 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). This data was developed using the same antibody clone with 86115-5-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 86115-5-PBS in a different storage buffer formulation.