

## MGMT (Marker of Suppressor of Mutation and Carcinogenesis) Antibody

Mouse Monoclonal Antibody [Clone MGMT/4791]

Catalog No	Format	Size
4255-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4255-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4255-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

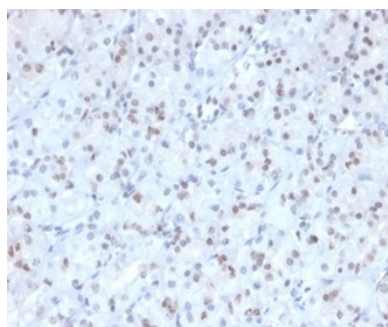
Applications	Tested Dillution	Note
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

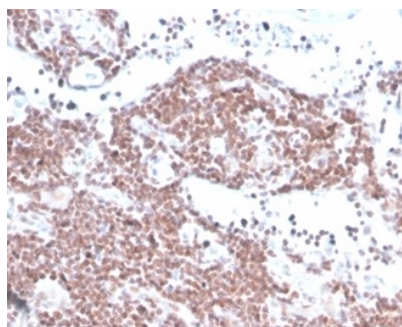
<b>Clone</b>	MGMT/4791
<b>Gene Name</b>	MGMT
<b>Immunogen</b>	Purified His-tagged MGMT protein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1
<b>Mol. Weight of Antigen</b>	21.646 kDa
<b>Cellular Localization</b>	Nucleus
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Jurkat or MCF-7 cells. Human tonsil or stomach (IHC).

\*Optimal dilution for a specific application should be determined.

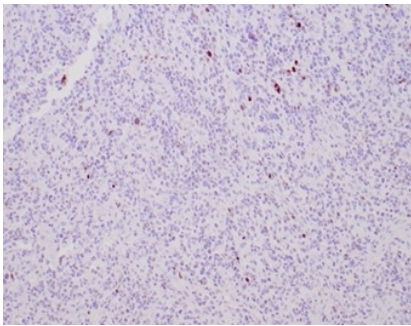
### Product Images for MGMT (Marker of Suppressor of Mutation and Carcinogenesis) Antibody



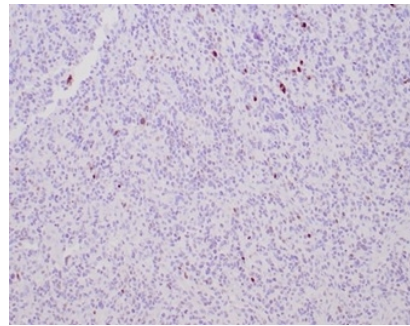
Formalin-fixed, paraffin-embedded human stomach stained with MGMT Mouse Monoclonal Antibody (MGMT/4791).



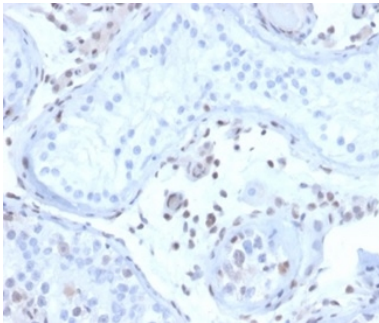
Formalin-fixed, paraffin-embedded human lymph node stained with MGMT Mouse Monoclonal Antibody (MGMT/4791).



Formalin-fixed, paraffin-embedded human glioma stained with MGMT Mouse Monoclonal Antibody (MGMT/4791).



Analysis of Protein Array containing more than 19,000 full-length human proteins using Monospecific Mouse Monoclonal Antibody to MGMT (MGMT/4791). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human testis stained with MGMT Mouse Monoclonal Antibody (MGMT/4791).

### Specificity & Comments

Cancer chemotherapeutic alkylating agents (e.g. BCNU,) act by inducing formation of lethal cross links at the O6 alkylguanine position in DNA. MGMT transfers alkyl adducts from the O6 position of guanine in DNA (prior to cross link formation) to a cysteine residue in its own sequence, thereby restoring DNA to its intact state. This transfer inactivates the MGMT enzyme and is irreversible; hence the level of MGMT in a cell is directly proportional to the level of DNA damage it can tolerate. In normal tissues, MGMT acts as a suppressor of mutation and carcinogenesis. Tumors with high levels of MGMT are likely to be drug resistant

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.