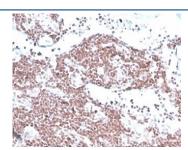


# MGMT Antibody [clone MGMT/4791] (V4036)

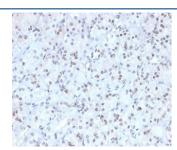
Catalog No.	Formulation	Size
V4036-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4036-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4036SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

# **Bulk quote request**

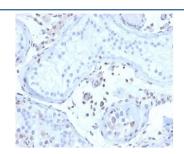
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	MGMT/4791
Purity	Protein A/G affinity
UniProt	P16455
Localization	Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This MGMT antibody is available for research use only.



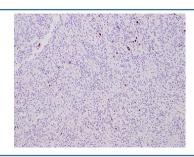
IHC staining of FFPE human lymph node tissue with MGMT antibody (clone MGMT/4791). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



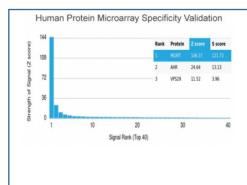
IHC staining of FFPE human stomach tissue with MGMT antibody (clone MGMT/4791). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human testis tissue with MGMT antibody (clone MGMT/4791). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human glioma tissue with MGMT antibody (clone MGMT/4791). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using MGMT antibody (clone MGMT/4791). These results demonstrate the foremost specificity of the MGMT/4791 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged antilgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

### **Description**

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

## **Application Notes**

Optimal dilution of the MGMT antibody should be determined by the researcher.

### **Immunogen**

Purified His-tagged MGMT protein was used as the immunogen for the MGMT antibody.

# **Storage** Aliquot the MGMT antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.