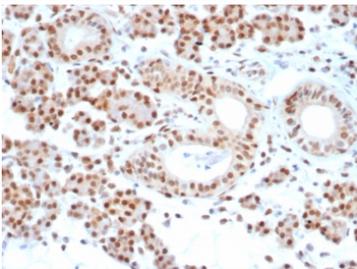


## MGMT Antibody [clone MGMT/7454] (V4126)

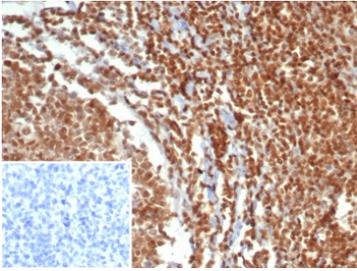
Catalog No.	Formulation	Size
V4126-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4126-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4126SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

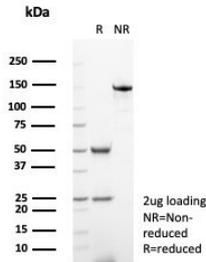
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG2, kappa
<b>Clone Name</b>	MGMT/7454
<b>Purity</b>	Protein A/G affinity
<b>UniProt</b>	P16455
<b>Localization</b>	Nucleus
<b>Applications</b>	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
<b>Limitations</b>	This MGMT antibody is available for research use only.



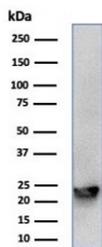
IHC staining of FFPE human salivary gland tissue with MGMT antibody (clone MGMT/7454). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human testis tissue with MGMT antibody (clone MGMT/7454). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free MGMT antibody (clone MGMT/7454) as confirmation of integrity and purity.



Western blot testing of human MCF-7 cell lysate with MGMT antibody (clone MGMT/7454). Predicted molecular weight ~22 kDa.

## 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.

