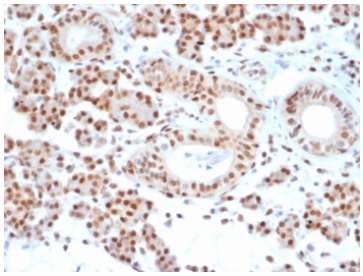
MGMT Antibody MGMT/7454 / MGMT Mouse Monoclonal Antibody [clone MGMT/7454] (V4126)

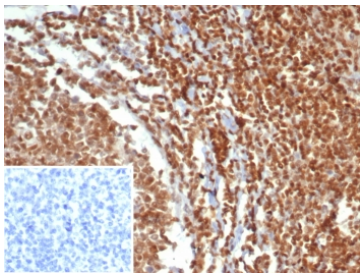
Catalog No.	Formulation	Size
V4126-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4126-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4126SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

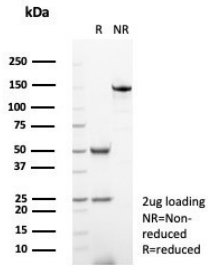
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	MGMT/7454
Purity	Protein A/G affinity
UniProt	P16455
Localization	Nucleus
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml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



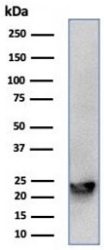
MGMT Antibody MGMT/7454 Immunohistochemistry Analysis. IHC staining of FFPE human salivary gland tissue with MGMT antibody (clone MGMT/7454). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



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.

For studies requiring a monoclonal reagent with knockout-validated western blot specificity, see our MGMT Antibody IDD-13.

Application Notes

Optimal dilution of the MGMT Antibody MGMT/7454 / MGMT Mouse Monoclonal 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.

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