

MGMT (O6-methylguanine-DNA methyltransferase) (Clone MT 3.1) Mouse Monoclonal Antibody

Specificity: Human. Also reacts weakly with mouse, rat, and hamster. Others-not known

Immunogen: Purified recombinant human MGMT protein

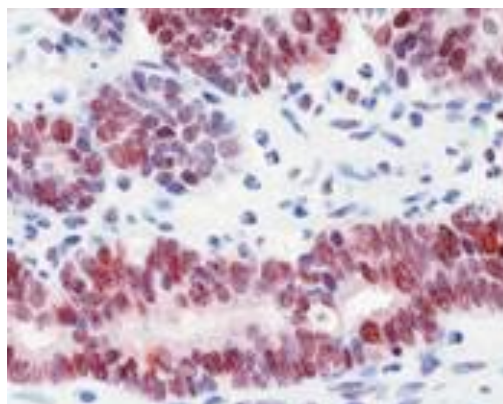
Ig Class: IgG1

Storage: Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

Staining procedures: Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:20-40; *Positive Control:* Colon carcinoma. *Cellular Localization:* Nuclear. *Intended Use:* In vitro diagnosis (IVD).

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.

Supplied As: Purified antibody in 0.2% BSA and 15mM sodium azide.



Formalin-fixed, paraffin-embedded human colon carcinoma stained with MGMT antibody using peroxidase-conjugate and DAB chromogen. Note the nuclear staining of tumor cells

Cat. #Z2149 (1.0 ml)