For Research Use Only

## CoraLite®594-conjugated MGMT Monoclonal antibody



Catalog Number: CL594-67476

**Basic Information** 

Catalog Number: CL594-67476

Size: 1000 µg/ml Source: Mouse

IgG2a Immunogen Catalog Number:

AG29936

Observed MW: 22 kDa

GenBank Accession Number:

BC000824 GeneID (NCBI): 4255 **UNIPROT ID:** P16455 Full Name:

O-6-methylguanine-DNA methyltransferase Calculated MW:

22 kDa

**Purification Method:** 

Protein A purification CloneNo.:

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

1H2C9

**Applications** 

**Tested Applications:** 

FC (Intra)

Isotype:

Species Specificity:

**Background Information** 

MGMT is the primary vehicle for cellular removal of alkyl lesions from the O-6 position of guanine and the O-4 position of thymine. While key to the maintenance of genomic integrity, MGMT also removes damage induced by alkylating chemotherapies, inhibiting the efficacy of cancer treatment [PMID:23065697]. MGMT is the primary mechanism for the removal of alkylation damage from the O-6 position of guanine [PMID: 17482892]. The O-6 position of guanine is one of several positions in DNA bases to which alkyl groups are attached in SN1 alkylation reactions, and this repair has been well-characterized in mammalian cells and via MGMT homologs in bacteria and Archaea.[PMID: 10767620]

Storage

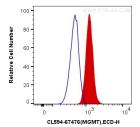
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1X10^6 Jurkat cells were intracellularly stained with 0.4 ug CoraLite®594 Anti-Human MGMT (CL594-67476, Clone:1H2C9) (red), or 0.4 ug Mouse IgG2a Isotype Control (CL594-66360-2, Clone: K11A1B2A2) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).