For Research Use Only

CoraLite® Plus 488-conjugated MGMT Monoclonal antibody



Catalog Number: CL488-67476

Basic Information

Catalog Number: CL488-67476

1000 µg/ml Source: Mouse Isotype: IgG2a

Immunogen Catalog Number:

AG29936

Tested Applications: FC (Intra), IF/ICC

GenBank Accession Number:

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

O-6-methylguanine-DNA methyltransferase Calculated MW:

22 kDa Observed MW: 22 kDa

Purification Method: Protein A purification

CloneNo.:

1H2C9

Recommended Dilutions:

IF 1:50-1:500

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Species Specificity:

Positive Controls:

IF: HepG2 cells,

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

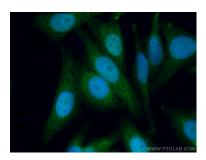
Storage:

Store at -20°C. Avoid exposure to light.

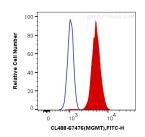
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Coralite® Plus 488-conjugated MGMT antibody (CL488-67476, Clone: 1H2C9) at dilution of 1:100.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human MGMT (CL488-67476, Clone:1H2C9) (red), or 0.4 ug Mouse IgG2a Isotype Control (CL488-66360-2, Clone: K11A1B2A2) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).