For Research Use Only

CoraLite® Plus 647-conjugated MGMT Monoclonal antibody



Catalog Number: CL647-67476

Basic Information

Catalog Number: GenBank Accession Number:

CL647-67476 BC000824 GeneID (NCBI):

100ul , Concentration: 1000 $\mu g/ml$ by 4255 Nanodrop: **UNIPROT ID:** P16455 Mouse Full Name:

Isotype: O-6-methylguanine-DNA methyltransferase lgG2a Immunogen Catalog Number: Calculated MW: AG29936 22 kDa

> Observed MW: 22 kDa

Purification Method:

Protein A purification

CloneNo.: 1H2C9

Excitation/Emission maxima

wavelengths: 654 nm / 674 nm

Applications

Tested Applications:

FC (Intra)

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]

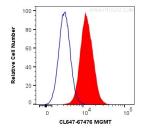
Storage

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 HepG2 cells were intracellularly stained with 0.2 ug CoraLite® Plus 647 Anti-Human MGMT (CL647-67476, Clone:1H2C9) (red), or 0.2 ug APC-65124; APC Mouse IgG1 Isotype Control (APC-65124, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).