

10-7010: Monoclonal Antibody to DNMT2 (Clone: ABM1H70)

Clonality :	Monoclonal
Clone Name :	ABM1H70
Application :	FACS,WB
Reactivity :	Mouse,Human
Gene :	TRDMT1
Gene ID :	1787
Uniprot ID :	O14717
Format :	Purified
Alternative Name :	DNA (cytosine-5)-methyltransferase-like protein 2, DNA methyltransferase homolog HsaIIP, DNMT2
Isotype :	Mouse IgG1, Kappa
Immunogen Information :	A partial length recombinant protein from DNMT2 was used as the immunogen for this antibody.

Description

DNMT2, also known as tRNA-aspartic acid methyltransferase 1 (TRDMT1), is highly conserved cytosine-C5 methyltransferase that introduces the C38 methylation of tRNA^{Asp} in many species, including lower eukaryotes, plants, insects, and humans. DNMT2 contains all 10 sequence motifs that are conserved among m5C MTases, including the consensus S-adenosyl-L-methionine-binding motifs and the active site ProCys dipeptide. It is a relatively small protein of 391 amino acids and lacks the large N-terminal domains present in the DNMT1 and DNMT3 families. DNMT2 is ubiquitously expressed with multiple mRNA species in most human and mouse adult tissues. It is variably expressed in human cancer cell lines.

Product Info

Amount :	25 µg / 100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

WB: 4-6 µg/ml, FACS: 0.5-1 µg/10⁶

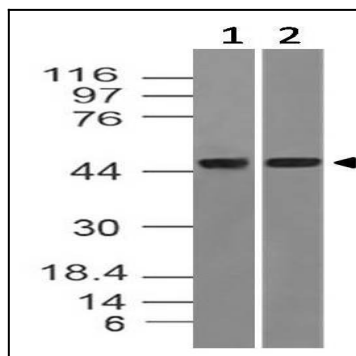


Fig-1: Western blot analysis of DNMT2. Anti-DNMT2 antibody (Clone: ABM1H70) was used at 4 $\mu\text{g}/\text{ml}$ on Jurkat and mouse embryonic liver lysates.

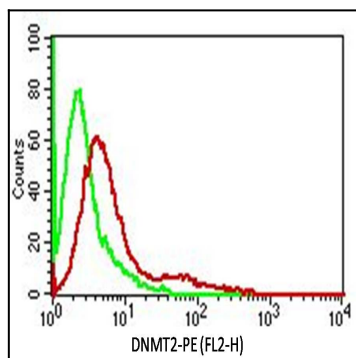


Fig-2: Intracellular Flow analysis of DNMT2 antibody in HeLa cells using 0.5 $\mu\text{g}/10^6$ cells of anti-DNMT2 antibody (ABM1H70). Green represents isotype control; red represents anti-DNMT 2 antibody. Goat anti-mouse PE conjugate was used as secondary antibody. (Cells were fixed with 4% paraformaldehyde for 10 min and washed with PBS by centrifuging at 1100 for 5 min followed by permeabilization for 20 min and washed again as mentioned above. Then cell were incubated with primary antibody for 45 min. and after washing the cells twice in PBS, incubated with conjugated secondary antibody for 30 min. Data acquisition was done after washing twice with PBS as mentioned above).