

10-7003-F: Monoclonal Antibody to DNMT3a (Clone: ABM13G4)

Clonality :	Monoclonal
Clone Name :	ABM13G4
Application :	FACS
Reactivity :	Human
Conjugate :	FITC
Gene :	DNMT3A
Gene ID :	1788
Uniprot ID :	Q9Y6K1
Format :	Purified
Alternative Name :	DNA (cytosine-5)-methyltransferase 3A, DNA methyltransferase HsaIIIA, DNA MTase HsaIIIA, M.HsaIIIA
Isotype :	Mouse IgG1, Kappa
Immunogen Information :	A partial length recombinant protein from DNMT3a was used as the immunogen for this antibody.

Description

Dnmt3a belongs to the mammalian methyltransferase gene family which is responsible for tissue-specific gene expression. Dnmt3a together with other methyltransferases conducts de novo methylation of cytosine residues in CpG islands by the enzymatic addition of methyl residues from S-adenosyl-L-methionine to the 5-carbon atom of the cytosine ring. Dnmt3a also directs a metabolic program by repressing key genes to enable the coupling of insulin secretion to glucose levels during beta cell maturation. Loss of Dnmt3a in pancreatic beta cells prevents this developmental metabolic reprogramming, resulting in loss of GSIS (Glucose-Stimulated Insulin Secretion)). Dnmt3a overexpression has been found in several cancers including AML (Acute Myeloid Leukemia).

Product Info

Amount :	100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 125 µl/100 µg in 500 µl Tris and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C, stable for 6 months.

Application Note

FACS: 0.5-1 µg/10⁶

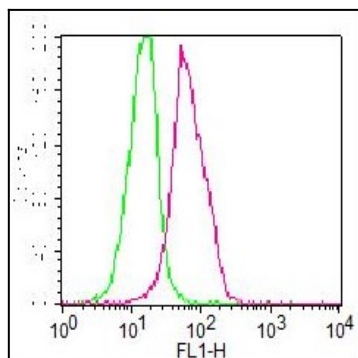


Fig-1: Intracellular FLOW staining of PMA treated Jurkat cells using 0.5 μ g of antibody. Green represents FITC conjugated IgG1 isotype control (Abeomics), Red represents FITC conjugated DNMT3a (10-7003-F).