

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

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	ABM13G4
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	FITC
<b>Gene :</b>	DNMT3A
<b>Gene ID :</b>	1788
<b>Uniprot ID :</b>	Q9Y6K1
<b>Format :</b>	Purified
<b>Alternative Name :</b>	DNA (cytosine-5)-methyltransferase 3A, DNA methyltransferase Hsa11IA, DNA MTase Hsa11IA, M.Hsa11IA
<b>Isotype :</b>	Mouse IgG1, Kappa
<b>Immunogen Information :</b>	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

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

### Application Note

FACS: 0.5-1 µg/10<sup>6</sup>

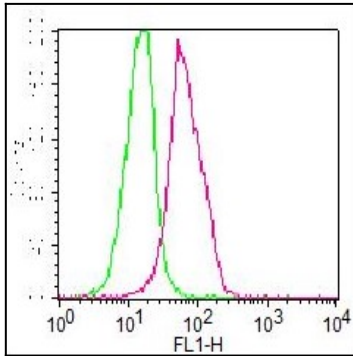


Fig-1: Intracellular FLOW staining of PMA treated Jurkat cells using 0.5 µg of antibody. Green represents FITC conjugated IgG1 isotype control (Abeomics), Red represents FITC conjugated DNMT3a (10-7003-F).