Datasheet for ABIN387878

anti-DNMT1 antibody (C-Term)

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Overview

Quantity:	400 µL
Target:	DNMT1
Binding Specificity:	AA 1588-1616, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DNMT1 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS)

Product Details

Immunogen:	This Dnmt1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1588-1616 amino acids from the C-terminal region of human Dnmt1.
Clone:	RB01848
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	DNMT1
Alternative Name:	DNMT1 (DNMT1 Products)

Target Details

Background:	Methylation of DNA at cytosine residues plays an important role in regulation of gene expression, genomic imprinting and is essential for mammalian development. Hypermethylation of CpG islands in tumor suppressor genes or hypomethylation of bulk genomic DNA may be linked with development of cancer. To date, 3 families of mammalian DNA methyltransferase genes have been identified which include Dnmt1, Dnmt2 and Dnmt3. Dnmt1 is constitutively expressed in proliferating cells and inactivation of this gene causes global demethylation of genomic DNA and embryonic lethality. Dnmt2 is expressed at low levels in adult tissues and its inactivation does not affect DNA methylation or maintenance of methylation. The Dnmt3 family members, Dnmt3a and Dnmt3b, are strongly expressed in ES cells but their expression is down regulated in differentiating ES cells and is low in adult somatic tissue. Dnmt1 co-purifies with the retinoblastoma (Rb) tumour suppressor gene product, E2F1, and HDAC1. Dnmt1 also cooperates with Rb to repress transcription from promoters containing E2Fbinding sites suggesting a link between DNA methylation, histone deacetylase and sequence-specific DNA binding activity, as well as a growth-regulatory pathway that is disrupted in nearly all cancer cells.
Molecular Weight:	183165
Gene ID:	1786
NCBI Accession:	NP_001124295, NP_001370
UniProt:	P26358
Pathways:	SARS-CoV-2 Protein Interactome, The Global Phosphorylation Landscape of SARS-CoV-2 Infection

Application Details

Application Notes:	WB: 1:1000. FC: 1:10~50
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

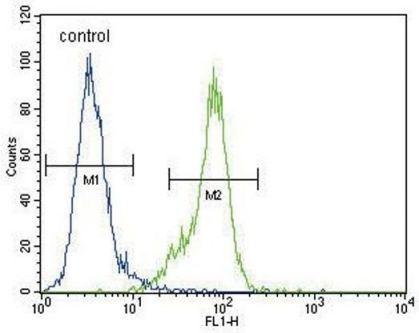
Handling

Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.
Expiry Date:	6 months

Publications

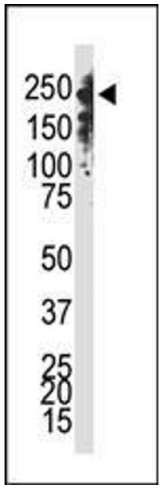
Product cited in:	Wang, Wang, Liu, Liu, Tay, Walsh, Yang, Wu: "CRISPR/Cas9 mediated genome editing of Helicoverpa armigera with mutations of an ABC transporter gene HaABCA2 confers resistance to Bacillus thuringiensis Cry2A toxins." in: **Insect biochemistry and molecular biology**, Vol. 87, pp. 147-153, (2017) (PubMed).

Images



Flow Cytometry

Image 1. Dnmt1 Antibody (C-term) (ABIN387878 and ABIN2844085) flow cytometric analysis of MDA-M cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Western Blotting

Image 2. The anti-Dnmt1 C-term Pab (ABIN387878 and ABIN2844085) is used in Western blot to detect Dnmt1 in Jurkat cell lysate.