

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **Product datasheet for TA336383**

# **DNMT3A Mouse Monoclonal Antibody [Clone ID: 64B814.1]**

#### **Product data:**

**Product Type:** Primary Antibodies

**Clone Name:** 64B814.1

Applications: WB

**Recommend Dilution:** WB: 1-3 ug/ml, IF: 5 ug/ml

Reactivity: Human, Mouse

**Host:** Mouse

Isotype: IgG1, kappa
Clonality: Monoclonal

**Immunogen:** This antibody was raised against bacteria expressed HIS-tag recombinant mouse Dnmt3a.

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

**Concentration:** 0.5 mg/ml

**Purification:** Protein G purified

**Gene Name:** DNA (cytosine-5-)-methyltransferase 3 alpha

Database Link: NP 783328 Entrez Gene 13435 MouseEntrez Gene 1788 Human

**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. Recently, it has been shown that naturally occurring mutations of Dnmt3b

gene occurs in patients with a rare autosomal recessive disorder, termed ICF (immunodeficiency, centromeric instability, and facial anomalies) syndrome.

Synonyms: DNMT3A2; M.HsallIA; TBRS

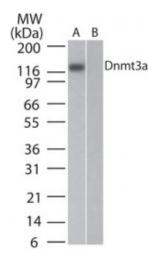




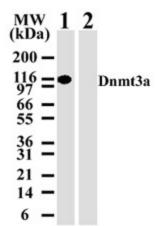
**Protein Families:** Druggable Genome

**Protein Pathways:** Cysteine and methionine metabolism, Metabolic pathways

### **Product images:**

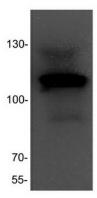


Western Blot: Dnmt3a Antibody (64B814.1) TA336383 - Analysis of Dnmt3a in (A) Dnmt3a transfected and (B) untransfected 293 cell lysate (Novus, 40212) using Dnmt3a antibody at 1 ug/ml.



Western Blot: Dnmt3a Antibody (64B814.1) TA336383 - analysis of Dnmt3a using Dnmt3a antibody at 2 ug/ml in 293 cell lysate transfected with either mouse Dnmt3a (lane 1) or mouse Dnmt3b (lane 2).





Western Blot: Dnmt3a Antibody (64B814.1) TA336383 - WB for Dnmt3a in mouse brain cells. Image from verified customer review.