

# **Product datasheet for TA347116**

#### OriGene Technologies, Inc.

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## **DNMT3B Rabbit Polyclonal Antibody**

#### **Product data:**

**Product Type:** Primary Antibodies

Applications: ELISA, IF, WB

**Recommended Dilution:** ELISA (1:10,000); Western blotting (1:1,000); Immunofluorescence (1:1,000)

Reactivity: Human

Host: Rabbit

Isotype: IgG

Clonality: Polyclonal

Immunogen: The immunogen for anti-DNMT3B antibody: mouse DNMT3B (DNA methyltransferase 3B),

using 3 KLH-conjugated synthetic peptides containing sequences from different parts of the

protein.

Concentration: lot specific

**Purification:** Affinity purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: DNA (cytosine-5-)-methyltransferase 3 beta

Database Link: NP 787045

Entrez Gene 1789 Human

Q9UBC3

Background: DNMT3B (UniProtKB/Swiss-Prot entry Q9UBC3) catalyses the genome wide de novo

methylation of CpG residues, which regulates gene expression. DNMT3B is essential for development. DNA methylation on CpG residues is coordinated with methylation of histones. Six different isoforms of DNMT3B, produced by alternative splicing, exist although isoforms 4 and 5 may not be functional due to the absence of two conserved methyltransferase motifs.

Synonyms: ICF; ICF1; M.HsallIB

Protein Families: Druggable Genome, Embryonic stem cells, Induced pluripotent stem cells, Stem cell -

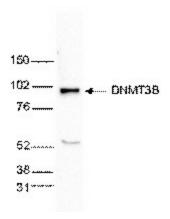
Pluripotency

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





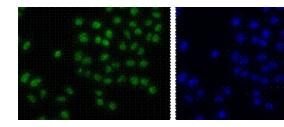
## **Product images:**



WB using the antibody against DNMT3B diluted 1:1,000 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.



Determination of the antibody titer To determine the titer of the antibody, an ELISA was performed using a serial dilution of antibody against DNMT3B. The plates were coated with the peptides used for immunization of the rabbit. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:220,000.





HeLa cells were stained with the antibody against DNMT3B and with DAPI. Cells were fixed with 4% formaldehyde for 10' and blocked with PBS/TX-100 containing 5% normal goat serum and 1% BSA. The cells were immunofluorescently labelled with the DNMT3B antibody (left) diluted 1:1,000 in blocking solution followed by an anti-rabbit antibody conjugated to Alexa488. The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown on the right.