## AbFlex® DNMT1 antibody (rAb)



Catalog Nos: 91175, 91176

RRID: AB\_3216330 Application(s): WB Reactivity: Human Quantities: 100 µg, 10 µg

Purification: Protein A Chromatography

Host: Mouse Isotype: IgG2a

Molecular Weight: 190 kDa

**Background:** AbFlex<sup>®</sup> antibodies are recombinant antibodies (rAbs) that have been generated using defined DNA sequences to produce highly specific, reproducible antibodies. Each AbFlex antibody contains a 6xHis Tag, a Biotinylation Tag for enzymatic biotin conjugation using the biotin ligase, BirA, and a sortase recognition motif (LPXTG) to attach a variety of labels directly to the antibody including fluorophores, enzymatic substrates (HRP, AP), peptides, drugs as well as solid supports. AbFlex<sup>®</sup> DNMT1 antibody was expressed in CHO cells and contains mouse immunoglobulin heavy and light chains.

DNMT1 (DNA (cytosine-5)-methyltransferase) proteins are involved in DNA methylation in which a methyl group is added to a cytosine residue on DNA, commonly at the C5 position of a CpG dinucleotide. Three families of DNMTs have been identified: DNMT1, DNMT2, and DNMT3 (comprised of DNMT3A and DNMT3B). DNMT1 is the most abundant DNMT in somatic cells and shows a preference for methylating hemi-methylated DNA. It is considered to be a maintenance DNA methyltransferase that is important in the maintenance of specific patterns of methylation throughout cellular divisions. Methylation of mammalian DNA has long been recognized to play a major role in a number of cellular functions such as embryonic development, genetic imprinting, X chromosome inactivation and the control of gene expression. DNA methylation is generally associated with transcriptional repression.

**Immunogen:** This antibody was raised against recombinant protein comprising full length human DNMT1 (DNA (cytosine-5)-methyltransferase 1). The antibody does not react with mouse Dnmt1.

**Buffer:** Purified IgG in 140 mM Hepes, pH 7.5, 70 mM NaCl, 32 mM NaOAc, 0.035% sodium azide, 30% glycerol. Sodium azide is highly toxic.

## **Application Notes:**

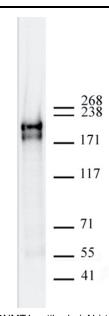
Applications Validated by Active Motif:

WB:  $0.5 - 2 \mu g/ml$ 

AbFlex<sup>®</sup> recombinant antibodies are genetically derived from DNA sequences of parental hybridoma clones. For details on the parental clone, see Catalog No. 61467.

**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



AbFlex<sup>®</sup> DNMT1 antibody (rAb) tested by Western blot.
20 μg of Jurkat nuclear extract was run on SDS-PAGE and probed with AbFlex® DNMT1 antibody at 0.5 μg/ml.