



# Anti-DNMT3A monoclonal antibody (DCABH-11309)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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| <b>Antigen Description</b> | CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a DNA methyltransferase that is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes to the cytoplasm and nucleus and its expression is developmentally regulated. Alternative splicing results in multiple transcript variants encoding different isoforms. |
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| <b>Immunogen</b>          | A synthetic peptide of human DNMT3A is used for rabbit immunization.     |
| <b>Isotype</b>            | IgG                                                                      |
| <b>Source/Host</b>        | Rabbit                                                                   |
| <b>Species Reactivity</b> | Human                                                                    |
| <b>Purification</b>       | Protein A                                                                |
| <b>Conjugate</b>          | Unconjugated                                                             |
| <b>Applications</b>       | Western Blot (Transfected lysate); ELISA                                 |
| <b>Buffer</b>             | In 1x PBS, pH 7.4                                                        |
| <b>Preservative</b>       | None                                                                     |
| <b>Storage</b>            | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |

## GENE INFORMATION

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| <b>Gene Name</b>           | <a href="#">DNMT3A DNA (cytosine-5-)-methyltransferase 3 alpha [ Homo sapiens ]</a>                                                                                                                                                                                                                                                                                                                                  |
| <b>Official Symbol</b>     | DNMT3A                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Synonyms</b>            | DNMT3A; DNA (cytosine-5-)-methyltransferase 3 alpha; DNA (cytosine-5)-methyltransferase 3A; DNA MTase HsaIIIA; DNA cytosine methyltransferase 3A2; DNMT3A2; M.HsaIIIA;                                                                                                                                                                                                                                               |
| <b>Entrez Gene ID</b>      | <a href="#">1788</a>                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Protein Refseq</b>      | <a href="#">NP_072046</a>                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>UniProt ID</b>          | <a href="#">Q9Y6K1</a>                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Chromosome Location</b> | 2p23                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Pathway</b>             | Cysteine and methionine metabolism, organism-specific biosystem; Cysteine and methionine metabolism, conserved biosystem; Metabolic pathways, organism-specific biosystem; Methionine degradation, organism-specific biosystem; Methionine degradation, conserved biosystem; One Carbon Metabolism, organism-specific biosystem; Validated targets of C-MYC transcriptional repression, organism-specific biosystem; |
| <b>Function</b>            | DNA (cytosine-5-)-methyltransferase activity; DNA (cytosine-5-)-methyltransferase activity, acting on CpG substrates; DNA binding; chromatin binding; metal ion binding; methyltransferase activity; protein binding; transferase activity; unmethylated CpG bi                                                                                                                                                      |