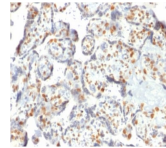


DNMT3A / DNA Methyltransferase 3 Alpha Monoclonal Mouse Antibody (PCRP-DNMT3A-1E2)



Product Description

The specificity of this monoclonal antibody to its intended target was validated by HuProt™ Array, containing more than 19,000, full-length human proteins. DNMT3A is required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. It modifies DNA in a non-processive manner and also methylates non-CpG sites. May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1. Plays a role in paternal and maternal imprinting. Required for methylation of most imprinted loci in germ cells. Acts as a transcriptional corepressor for ZBTB18. Recruited to trimethylated 'Lys-36' of histone H3 (H3K36me3) sites. Can actively repress transcription through the recruitment of HDAC activity. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Product attributes

| | |
|---------------------------------------|--|
| Antibody number | #1898 |
| Antibody reactivity (target) | DNA Methyltransferase 3 Alpha, DNMT3A |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | PCRP-DNMT3A-1E2 |
| Isotype | IgG1 |
| Molecular weight | 102 kDa |
| Synonyms | DNA methyltransferase 3 alpha; DNA methyltransferase Hsall1A; DNAMTaseHsall1A; DNMT; DNMT3A2; M.Hsall1A; MCMT; TBR5 |
| Human gene symbol | DNMT3A |
| Entrez gene ID | 1788 |
| SwissProt | Q16655 |
| Unigene | 154069 |
| Immunogen | Recombinant full-length human DNMT3A protein |
| Antibody target cellular localization | Nucleus |
| Verified antibody applications | IHC (FFPE) (verified) |
| Species reactivity | Human |
| Antibody application notes | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology (formalin): 1-2 ug/mL for 30 minutes at RT, Immunoprecipitation 2-4 ug/mg protein, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA pH 9.0 for 10-20 minutes followed by cooling at RT for 20 minutes, Western blotting 0.5-1.0 ug/mL, Optimal dilution for a specific application should be determined by user |
| Positive control | HeLa cells or Placenta |
| Shipping condition | Room temperature |
| Storage Conditions | Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |
| Regulatory status | For research use only (RUO) |
| Antibody/conjugate formulation | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide |
| Validated in protein array | Monospecific |
| Antibody research areas | DNA methylation |

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel | Dye Features |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNCB | Biotin | N/A | N/A | N/A | |
| BNUB | Purified | N/A | N/A | N/A | |
| BNUM | Purified, BSA-free | N/A | N/A | N/A | |

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