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# CHD3 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1344a

## Product Information

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| **Application** | WB, IHC, FC, ICC, E |
| **Primary Accession** | Q12873 |
| **Reactivity** | Human, Mouse |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 2G4 |
| **Isotype** | IgG1 |
| **Calculated MW** | 226592 |
| **Description** | This gene encodes a member of the CHD family of proteins which are characterized by the presence of chromo (chromatin organization modifier) domains and SNF2-related helicase/ATPase domains. This protein is one of the components of a histone deacetylase complex referred to as the Mi-2/NuRD complex which participates in the remodeling of chromatin by deacetylating histones. Chromatin remodeling is essential for many processes including transcription. Autoantibodies against this protein are found in a subset of patients with dermatomyositis. Three alternatively spliced transcripts encoding different isoforms have been described. |
| **Immunogen** | Purified recombinant fragment of human CHD3 expressed in E. Coli. |
| **Formulation** | Purified antibody in PBS with 0.05% sodium azide. |

## Additional Information

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| **Gene ID** | 1107 |
| **Other Names** | Chromodomain-helicase-DNA-binding protein 3, CHD-3, 3.6.4.12, ATP-dependent helicase CHD3, Mi-2 autoantigen 240 kDa protein, Mi2-alpha, Zinc finger helicase, hZFH, CHD3 |
| **Dilution** | WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~N/A |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | CHD3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | CHD3 |
| **Function** | ATP-dependent chromatin-remodeling factor that binds and distorts nucleosomal DNA (PubMed:28977666). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed:16428440, PubMed:28977666, PubMed:30397230, PubMed:9804427). Involved in transcriptional repression as part of the NuRD complex (PubMed:27068747). Required for anchoring centrosomal pericentrin in both interphase and mitosis, for spindle organization and centrosome integrity (PubMed:17626165). |
| **Cellular Location** | Nucleus, PML body. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=Associates with centrosomes in interphase and mitosis (PubMed:17626165). Localizes to sites of DNA damage (PubMed:28977666) |
| **Tissue Location** | Widely expressed. |

## References

1. Virus Res. 2003 Dec;98(1):83-91. 2. Mol Cell. 2004 Sep 24;15(6):853-65. 3. J Biol Chem. 2008 Dec 12;283(50):34976-82.

## Images

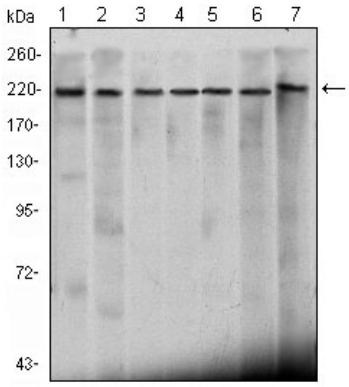



Figure 1: Western blot analysis using CHD3 mouse mAb against Hela (1), K562 (2), Jurkat (3), NTERA-2 (4), HEK293 (5), Raji (6) cell lysate and mouse brain (7) tissue lysate.

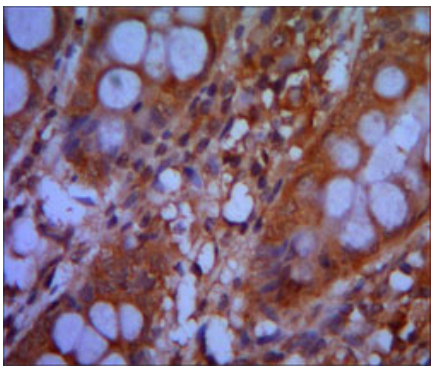


Figure 2: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using CHD3 mouse mAb with DAB staining.

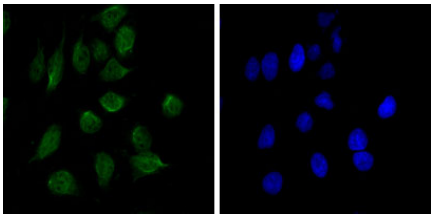


Figure 3: Immunofluorescence analysis of Hela cells using CHD3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

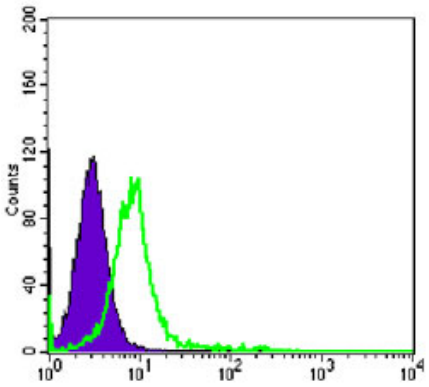



Figure 4: Flow cytometric analysis of K562 cells using CHD3 mouse mAb (green) and negative control (purple).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.