10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CHD3 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1344a

Specification

CHD3 Antibody - Product Information

Application	**WB, IHC, FC, ICC, E**
Primary Accession	Q12873
Reactivity	**Human, Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**226kDa KDa**

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.

CHD3 Antibody - Additional Information

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.

CHD3 Antibody - Protein Information

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.

CHD3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CHD3 Antibody - Images

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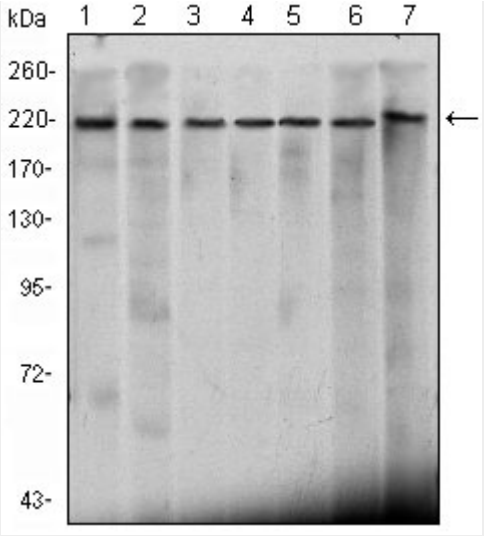

Figure 1: Western blot analysis using CHD3 mouse mAb against Hela (1), K562 (2), Jurkat (3), NTERA-2 (4), HEK293 (5), Raji (6) cell lysate and mouse brain (7) tissue lysate.

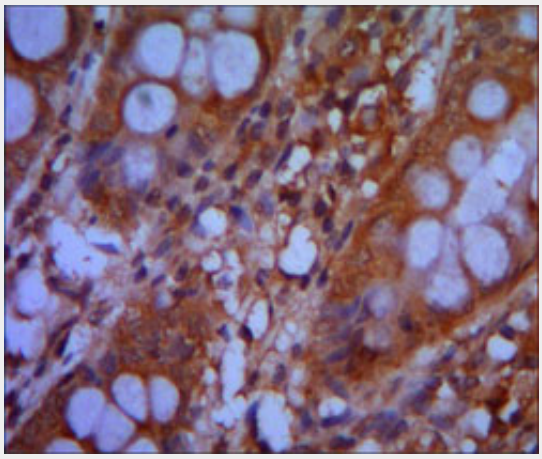

Figure 2: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using CHD3 mouse mAb with DAB staining.

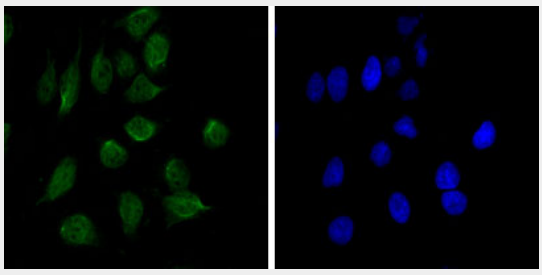

Figure 3: Immunofluorescence analysis of Hela cells using CHD3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

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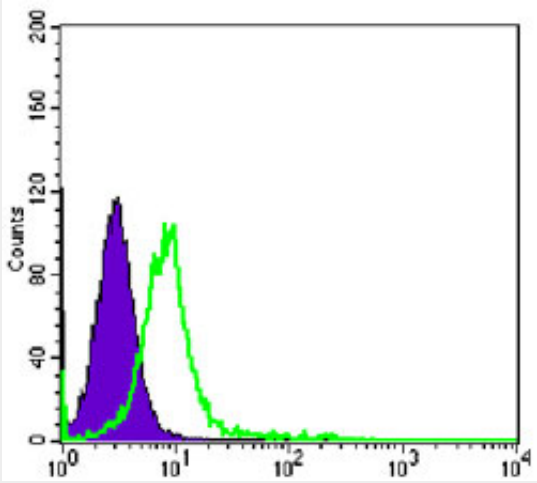

Figure 4: Flow cytometric analysis of K562 cells using CHD3 mouse mAb (green) and negative control (purple).

CHD3 Antibody - 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.