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CHD3 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1344a

Product Information

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

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

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

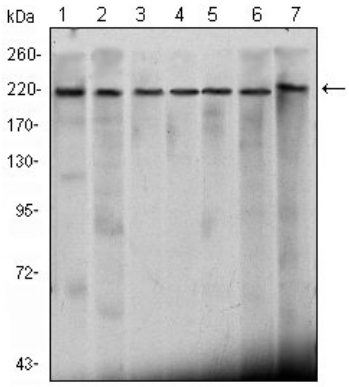

Figure 1: Western blot analysis using CHD3 mouse mAb against Hela (1), K562 (2), Jurkat (3), NTERA-2 (4), HEK293 (5), Raji (6) cell lysate and mouse brain (7) tissue lysate.

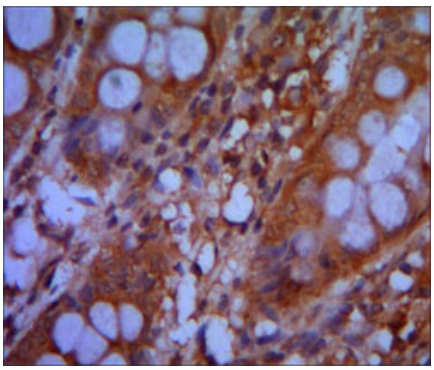

Figure 2: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using CHD3 mouse mAb with DAB staining.

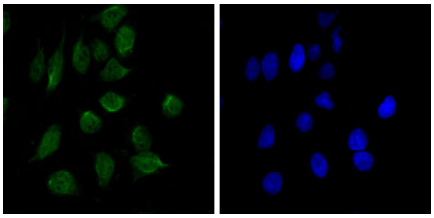

Figure 3: Immunofluorescence analysis of Hela cells using CHD3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

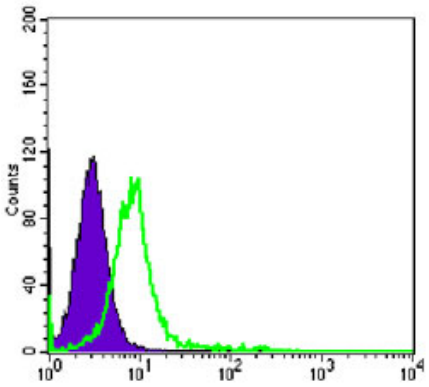

Figure 4: Flow cytometric analysis of K562 cells using CHD3 mouse mAb (green) and negative control (purple).

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