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CHD5 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22011a

Product Information

Application	WB, E
Primary Accession	Q8TDI0
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB54755
Calculated MW	223050

Additional Information

Gene ID	26038
Other Names	Chromodomain-helicase-DNA-binding protein 5, CHD-5, 3.6.4.12, ATP-dependent helicase CHD5, CHD5 {ECO:0000312|EMBL:AAL98962.1}, KIAA0444
Target/Specificity	This CHD5 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 64-98 amino acids from human CHD5.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CHD5 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CHD5 {ECO:0000312|EMBL:AAL98962.1}
Synonyms	KIAA0444
Function	ATP-dependent chromatin-remodeling factor that binds DNA through histones and regulates gene transcription. May specifically recognize and bind

	trimethylated 'Lys-27' (H3K27me3) and non-methylated 'Lys-4' of histone H3. Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin. Plays a role in the development of the nervous system by activating the expression of genes promoting neuron terminal differentiation. In parallel, it may also positively regulate the trimethylation of histone H3 at 'Lys-27' thereby specifically repressing genes that promote the differentiation into non-neuronal cell lineages. Regulates the expression of genes involved in cell proliferation and differentiation. Downstream activated genes may include CDKN2A that positively regulates the p53/TP53 pathway, which in turn, prevents cell proliferation. In spermatogenesis, it probably regulates histone hyperacetylation and the replacement of histones by transition proteins in chromatin, a crucial step in the condensation of spermatid chromatin and the production of functional spermatozoa.
Cellular Location	Nucleus. Chromosome {ECO:0000250|UniProtKB:A2A8L1}
Tissue Location	Preferentially expressed in total brain, fetal brain, and cerebellum. It is also moderately expressed in the adrenal gland and detected in testis.

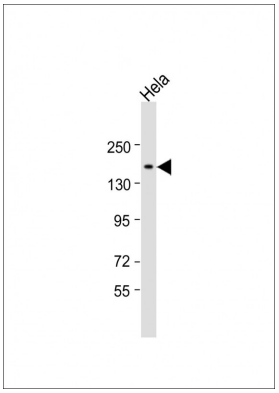
Background

Chromatin-remodeling protein that binds DNA through histones and regulates gene transcription. May specifically recognize and bind trimethylated 'Lys-27' (H3K27me3) and non- methylated 'Lys-4' of histone H3. Plays a role in the development of the nervous system by activating the expression of genes promoting neuron terminal differentiation. In parallel, it may also positively regulate the trimethylation of histone H3 at 'Lys- 27' thereby specifically repressing genes that promote the differentiation into non-neuronal cell lineages. Tumor suppressor, it regulates the expression of genes involved in cell proliferation and differentiation. Downstream activated genes may include CDKN2A that positively regulates the p53/TP53 pathway, which in turn, prevents cell proliferation. In spermatogenesis, it probably regulates histone hyperacetylation and the replacement of histones by transition proteins in chromatin, a crucial step in the condensation of spermatid chromatin and the production of functional spermatozoa.

References

Thompson P.M.,et al.Oncogene 22:1002-1011(2003).
Gregory S.G.,et al.Nature 441:315-321(2006).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Seki N.,et al.DNA Res. 4:345-349(1997).
Bagchi A.,et al.Cell 128:459-475(2007).

Images



Anti-CHD5 Antibody (N-Term) at 1:2000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 223 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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