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

CHD5 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51748

Product Information

Application	WB
Primary Accession	Q8TDI0
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	223050

Additional Information

Gene ID	26038
Other Names	Chromodomain-helicase-DNA-binding protein 5, CHD-5, ATP-dependent helicase CHD5, CHD5 {ECO:0000312|EMBL:AAL989621}, KIAA0444
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

May play a role in the development of the nervous system and the pathogenesis of neural tumors.

References

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Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Seki N.,et al.DNA Res. 4:345-349(1997).
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