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

# Anti-CHD5 Antibody

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** | KIAA0444; Chromodomain-helicase-DNA-binding protein 5; CHD-5; ATP-dependent helicase CHD5 |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CHD5. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000) |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

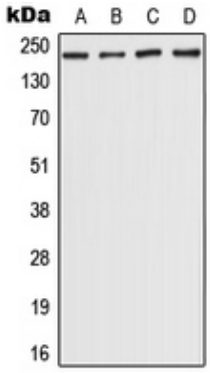
| | |
|---|---|
| **Name** | CHD5 {ECO:0000312\|EMBL:AAL98962.1} |
| **Synonyms** | KIAA0444 |
| **Function** | ATP-dependent chromatin-remodeling factor that binds DNA through histones and regulates gene transcription. May specifically recognize and bind trimethylated 'Lys-27' (H3K27me3) and non-methylated '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. |

## 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).
Sjoeblom T.,et al.Science 314:268-274(2006).


## Images




Western blot analysis of CHD5 expression in Hela (A), HepG2 (B), NIHC3T3 (C), rat brain (D) whole cell lysates. (Predicted band size: 223 kD; Observed band size: 223 kD)


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