

### CHD5 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF2571a

### **Specification**

### CHD5 Antibody (internal region) - Product Information

Application IF, FC
Primary Accession Q8TDI0

Other Accession <u>NP\_056372.1</u>, <u>26038</u>, <u>269610 (mouse)</u>

Predicted Human, Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml

Isotype IgG
Calculated MW 223050

## CHD5 Antibody (internal region) - 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

#### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

## **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**

CHD5 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

## CHD5 Antibody (internal region) - Protein Information

Name CHD5 {ECO:0000312|EMBL:AAL98962.1}

### Synonyms KIAA0444

### **Function**

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. 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**

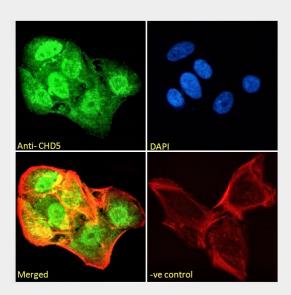
Preferentially expressed in total brain, fetal brain, and cerebellum. It is also moderately expressed in the adrenal gland and detected in testis.

## CHD5 Antibody (internal region) - Protocols

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

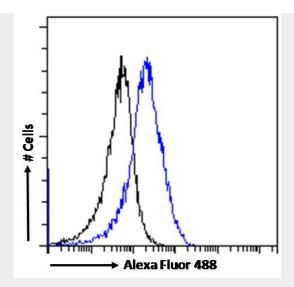
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## CHD5 Antibody (internal region) - Images



EB07740 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing nuclear and cytoplasmic staining. Actin filaments





EB07740 Flow cytometric analysis of paraformaldehyde fixed MCF7 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol

# CHD5 Antibody (internal region) - References

CHD5, a new member of the chromodomain gene family, is preferentially expressed in the nervous system. Thompson PM, Gotoh T, Kok M, White PS, Brodeur GM. Oncogene. 2003 Feb 20;22(7):1002-11. PMID: 12592387 [PubMed - indexed for MEDLINE