For Research Use Only

CHD8 Polyclonal antibody

Catalog Number: 29783-1-AP 1 Publications



Basic Information

Catalog Number:

GenBank Accession Number:

Antigen affinity purification

29783-1-AP Size: NM_001170629 GeneID (NCBI):

Recommended Dilutions:

150ul, Concentration: 750 ug/ml by

57680

WB 1:2000-1:12000

Nanodrop:

UNIPROT ID:

IHC 1:250-1:1000

Purification Method:

Source: Rabbit

Q9HCK8

Full Name:

Isotype: IgG chromodomain helicase DNA binding

protein 8

Immunogen Catalog Number:

Calculated MW:

AG31425

Observed MW:

290 kDa

290KD

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB

Species Specificity:

Human, Mouse, Rat

Cited Species:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: HeLa cells, mouse brain tissue, rat brain tissue

IHC: mouse brain tissue,

Background Information

Chromodomain helicase domain 8 (CHD8) is one of the most frequently mutated and most penetrant genes in the autism spectrum disorder (ASD). CHD8 is located on 14q11.2. It is part of the SNF2H-like ATP-dependent chromatin remodeling enzymes family referred to as CHD (chromodomain helicase DNA binding). CHD8 has two isoforms: CHD8L, a full-length protein of 280 kDa; and CHD8S (Duplin), a 110 kDa protein of the NH2-terminal chromodomain region resulting from alternative splicing (PMID:19151705). CHD8 is essential for development, as homozygote mutant mice die at an embryonic stage. CHD8 is expressed in the mouse at the embryonic stage (E12.5) in different levels in wide regions of the brain (neocortex, forebrain, ventricular, subventricular and mantle zones, rhombic lip (RL), and the isthmus of the cerebellum, as well as in lower RL and floor plate region of the hindbrain, midbrain, diencephalon, hypothalamus, pituitary gland, craniofacial region, and tongue and olfactory epithelium). In the postnatal mouse brain (P20), CHD8 is expressed in the cerebellum, neocortex, hippocampus, hypothalamus, and olfactory bulb (PMID:30277262). Peak expression levels were observed at E18-P7, then gradually decreased to adulthood. Highest expression was found in neurons, and lower levels in astrocyte and astroglia (PMID:30574290). In the mouse, CHD8 is expressed higher in brain compared to other tissues and in the embryo, compared to adult.

Notable Publications

Author	Pubmed ID	Journal	Application
Fenfei Liang	38905100	Cell Rep	WB

Storage

Storage:

Store at -20°C.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

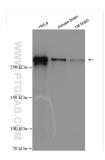
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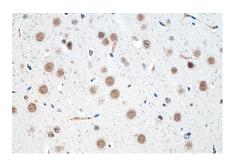
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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 29783-1-AP (CHD8 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 29783-1-AP (CHD8 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 29783-1-AP (CHD8 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).