For Research Use Only

CHD8 Recombinant antibody, PBS Only

Catalog Number:86032-1-PBS



Purification Method:

CloneNo.:

250612C4

Protein A purification

Basic Information

Catalog Number:

86032-1-PBS

GeneID (NCBI): 57680

100ug, Concentration: 1 mg/ml by Nanodrop: **UNIPROT ID:** Q9HCK8 Rabbit Full Name:

Isotype: chromodomain helicase DNA binding

IgG protein 8

Immunogen Catalog Number: Calculated MW: AG31425 290KD

Observed MW: 290 kDa

GenBank Accession Number:

NM 001170629

Applications

Tested Applications: WB, IF/ICC, Indirect ELISA

Species Specificity:

human, mouse, rat

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.

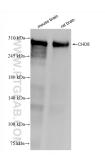
Storage

Storage: Store at -80°C. Storage Buffer: PBS only, pH7.3

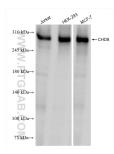
Selected Validation Data



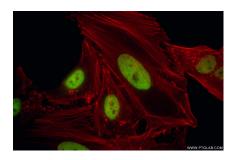
HeLa cells were subjected to SDS PAGE followed by western blot with 86032-1-RR (CHD8 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86032-1-PBS in a different storage buffer formulation.



mouse brain tissue were subjected to SDS PAGE followed by western blot with 86032-1-RR (CHD8 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86032-1-PBS in a different storage buffer formulation.



Various lysates were subjected to SDS PAGE followed by western blot with 86032-1-RR (CHD8 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86032-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CHD8 antibody (86032-1-RR, Clone: 250612C4) at dilution of 1:1000 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 86032-1-PBS in a different storage buffer formulation.