Product Name: CUL-4B Rabbit Polyclonal Antibody
Catalog #: APRab09535

Summary

Production Name	CUL-4B Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CUL4B
Alternative Names	CUL4B; KIAA0695; Cullin-4B; CUL-4B
Gene ID	8450.0
SwissProt ID	Q13620.The antiserum was produced against synthesized peptide derived from the Internal region of human CUL4B. AA range:711-760

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC-p: 1:100-300 ELISA: 1:20000.. IF 1:50-200
Molecular Weight	110kD

Background

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This gene is a member of the cullin family. The encoded protein forms a complex that functions as an E3 ubiquitin ligase and catalyzes the polyubiquitination of specific protein substrates in the cell. The protein interacts with a ring finger protein, and is required for the proteolysis of several regulators of DNA replication including chromatin licensing and DNA replication factor 1 and cyclin E. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],disease:Defects in CUL4B are the cause of Cabezas X-linked mental retardation syndrome (MRXC) [MIM:300354]; also called X-linked mental retardation with short stature small testes muscle wasting and tremor. MRXC patients show delayed puberty, hypogonadism, relative macrocephaly, moderate short stature, central obesity, unprovoked aggressive outbursts, fine intention tremor, pes cavus, and abnormalities of the toes.,disease:Defects in CUL4B are the cause of X-linked mental retardation-hypotonic facies syndrome type 2 (MRXHF2) [MIM:300639]; also called Smith-Fineman-Myers syndrome type 2 or SFM2. The distinguishing manifestations of MRXHF2 are relative microcephaly, short stature, hypertelorism, macrostomia, patulous lips, difficulty in speech, micrognathia, short thumbs and little fingers with adduction, hypotonia at age less than 10 years, and later hypertonia, restlessness, and seizures. IQ ranged from 40 to 57. Obligate carrier females were clinically normal except for rather large hands with deep palmar and finger creases with rhagades.,function:Core component of multiple cullin-RING-based E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins. As a scaffold protein may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition subunit. DC4BX(DTL) plays a role in PCNA-dependent polyubiquitination of CDT1 in response to radiation-induced DNA damage and during DNA replication. Required for histone H3 and histone H4 ubiquitination in response to ultraviolet and may be important for subsequent DNA repair.,pathway:Protein modification; protein ubiquitination.,PTM:Neddylated. Deneddylated via its interaction with the COP9 signalosome (CSN) complex.,similarity:Belongs to the cullin family.,subunit:Component of multiple DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complexes that seem to be formed of DDB1, CUL4A or CUL4B, RBX1 and a variable substrate recognition component which seems to belong to a protein family described as DCAF (Ddb1- and Cul4-associated factor) or CDW (CUL4-DDB1-associated WD40-repeat) proteins. Component of the DCX(DTL) complex with the putative substrate recognition component DTL. Component of the DCX(DDB2) complex with the putative substrate recognition component DDB2. Part of a complex with RBX1 and TIP120A/CAND1. Interacts with RBX1 and TIP120A/CAND1. Interacts with TMEM113. Interacts with GRWD1, SMU1, TLE2, TLE3, VPRBP, DDA1, IQWD1, C2orf37, DDB2, WDR23, WDR42A. May interact with WDR26, WDR51B, SNRNP40, WDR61, WDR76 and WDR5.,

Research Area

Nucleotide excision repair;Ubiquitin mediated proteolysis;

Image Data

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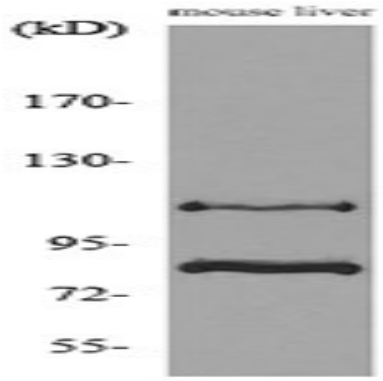
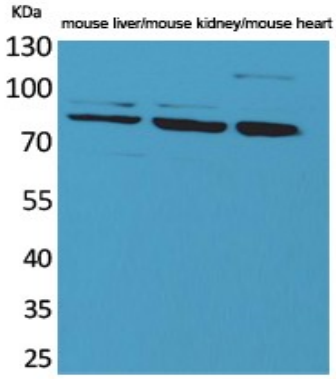
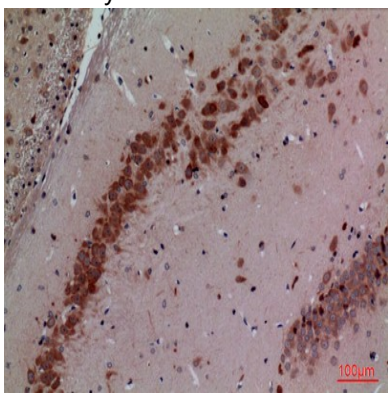


Western blot analysis of lysate from mouse liver cells, using CUL4B Antibody.



Western Blot analysis of mouse liver, mouse kidney, mouse heart cells using CUL-4B Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100

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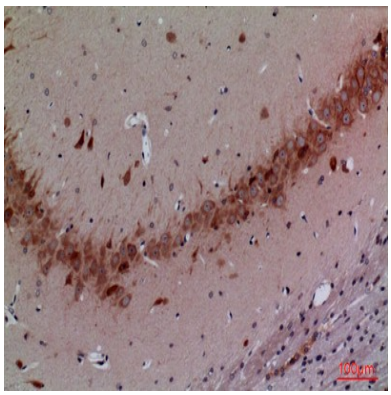
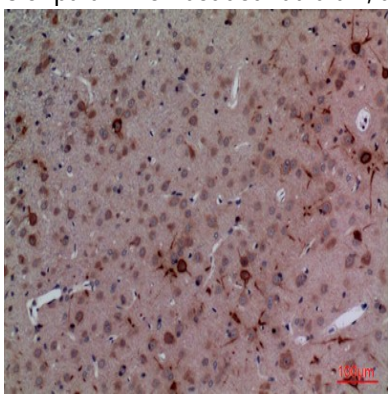
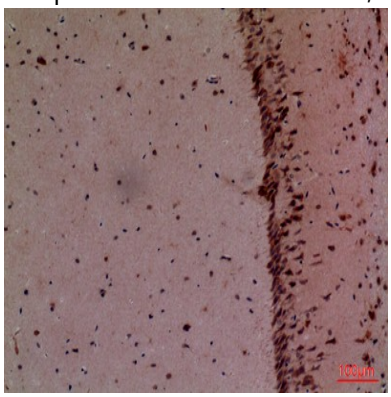


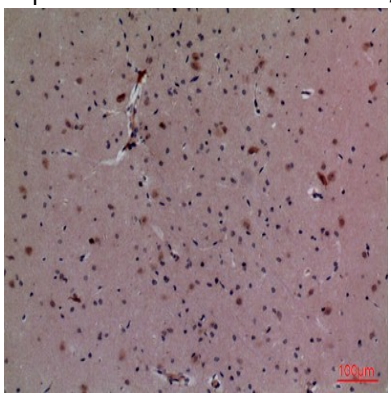
Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded mouse-brain, antibody was diluted at 1:100



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Note

For research use only.