



CUL4A/B Rabbit mAb

Catalog No	YP-rAb-17403
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	CUL4A/CUL4B
Protein Name	Cullin-4A (CUL-4A)/Cullin-4B
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	CUL4A/B;Cullin-4A (CUL-4A)/Cullin-4B;CUL4B ; KIAA0695 ; Cullin-4B ; CUL-4B;CUL4A/CUL4B
Observed Band	88kD, 104kD
Calculated Molecular Weight	88kD, 104kD
Cell Pathway	Nucleus .Cytoplasm.
Tissue Specificity	
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 E3 ubiquitin-protein ligase activity of the complex is dependent on the neddylation of the cullin subunit and is inhibited by the association of the deneddylated cullin subunit with TIP120A/CAND1. The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition component. DCX(DET1-COP1) directs ubiquitination of JUN. DCX(DDB2) directs ubiquitination of XPC. In association with RBX1, DDB1 and DDB2 is required for histone H3 and histone H4 ubiquitination in response to ultraviolet and may be important for subsequent DNA repair. DCX(DTL) plays a role in PCNA-dependent polyubiquitination of CDT1 and MDM2-dependent ubiquitination of TP53 in



response to radiation-induced DNA damage and during DNA replication. In association with DDB1 and SKP2 probably is involved in ubiquitination of CDKN1B/p27kip. Is involved in ubiquitination of HOXA9. 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 (DET1-COP1) complex with the substrate recognition component DET1 and COP1. Component of the DCX (DDB2) complex with the substrate recognition component DDB2. Component of the DCX (ERCC8) complex with the putative substrate recognition component ERCC8. Component of the DCX (DTL) complex with the putative substrate recognition component DTL. Interacts with DDB1, RBX1, RNF7, CTD1, TIP120A/CAND1, SKP2, CDKN1B, MDM2, TP53 and HOXA9. Interacts with DDB2; the interactions with DDB2 and CAND1 are mutually exclusive. Interacts with VPRBP, DTL, DDA1, IQWD1, WDR21A, C4ORF30, C2ORF37, DET1, WDTC1, WDR22, WDR23, WDR24A, RFWD2, PAFAH1B1, ERCC8, GRWD1, FBXW5, RBBP7, GNB2, WSB1, WSB2, NUP43, PWP1, FBXW8, ATG16L1, KATNB1 and RBBP4 RBBP5. May interact with WDR26, WDR51B, SNRNP40, WDR61, WDR76, WDR5. Can self-associate.

Background

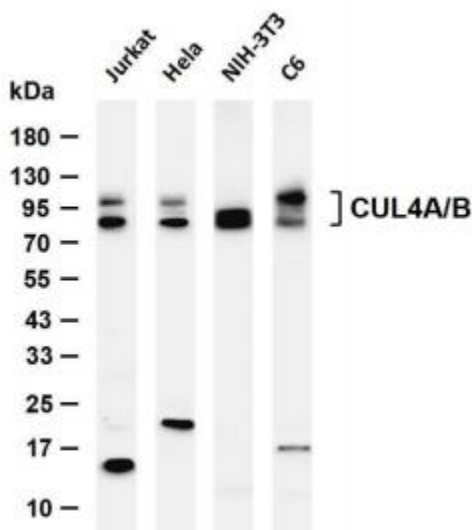
CUL4A is the ubiquitin ligase component of a multimeric complex involved in the degradation of DNA damage-response proteins (Liu et al., 2009 [PubMed 19481525]). [supplied by OMIM, Oct 2009]. CUL4B is a member of the cullin family. The encoded protein forms a complex that functions as an E3 ubiquitin 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],

matters needing attention

Avoid repeated freezing and thawing!

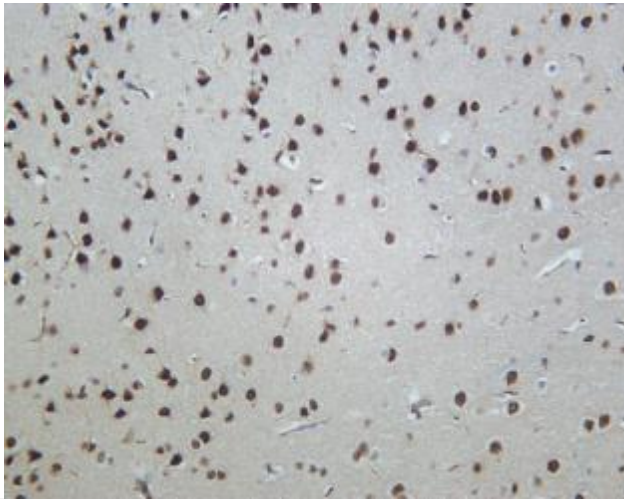
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

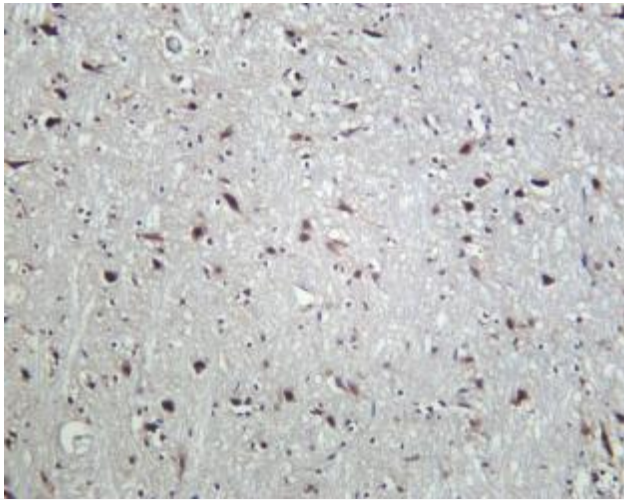


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CUL4A/B antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Jurkat Lane 2: HeLa Lane 3: NIH-3T3 Lane 4: C6 Predicted band size: 88, 104kDa Observed band size: 88, 104kDa

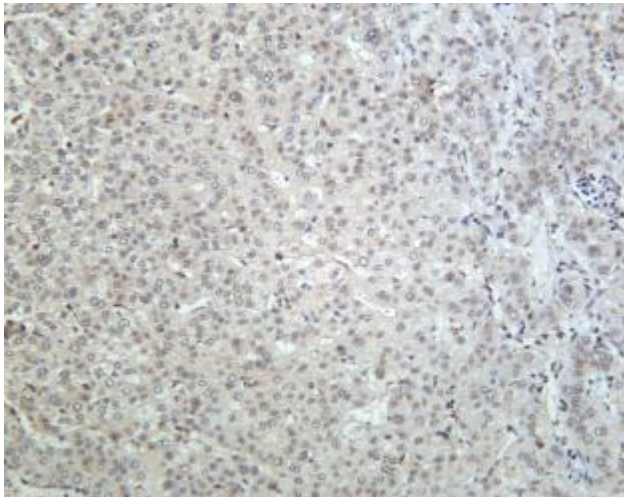




Mouse brain was stained with anti-CUL4A/B Rabbit antibody



Rat brain was stained with anti-CUL4A/B Rabbit antibody



Human hepatocellular carcinoma was stained with anti-CUL4A/B Rabbit antibody

