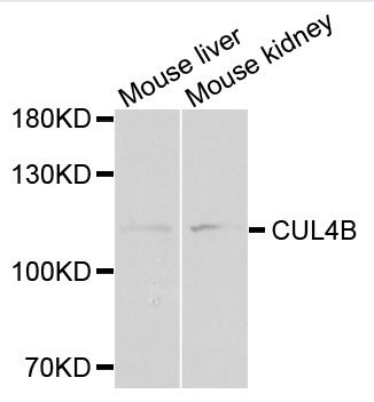
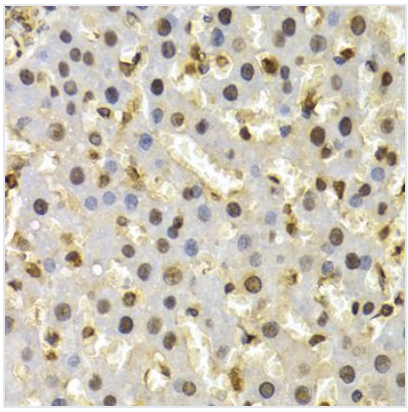
CUL4B Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

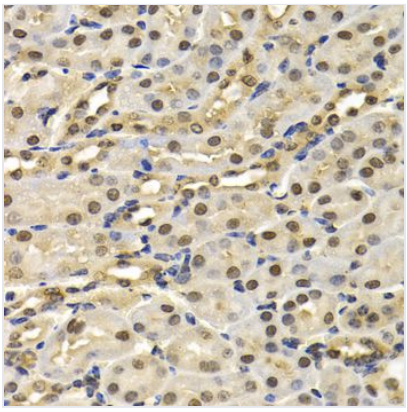
Product Name	CUL4B, Polyclonal Antibody
Full Product Name	CUL4B Polyclonal Antibody
Product Gene Name	anti-CUL4B antibody
Product Synonym Names	hCUL4B
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Purity/Purification	Affinity Purification
Concentration	1mg/ml (lot specific)
Preparation and Storage	Store at -20 degree C (regular) or -80 degree C (long term). Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Molecular Weight	913
OMIM	gene 300354
3D Structure	ModBase 3D Structure for Q13620
Species	Human
Immunogen	Recombinant protein of human CUL4B
Calculated Molecular Weight	104kDa
Product Categories/Family for anti-CUL4B antibody	Polyclonal
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CUL4B antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)
Application Notes for anti-CUL4B antibody	WB: 1:500 - 1:2000 IHC: 1:50 - 1:200 IF: 1:50 - 1:200
Related Product Information for anti-CUL4B antibody	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.
Other Notes	Small volumes of anti-CUL4B antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CUL4B purchase	MBS9126336 is an antibody targeting CUL4B. Also known as CUL4B Polyclonal Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.



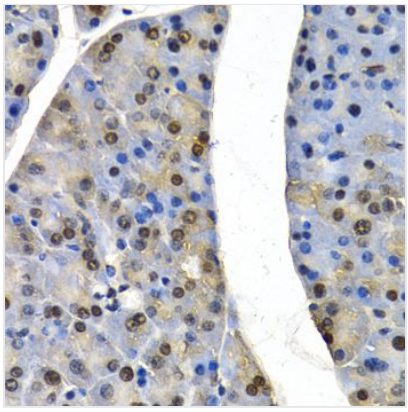
Western Blot (WB) of anti-CUL4B antibody
Western blot analysis of extracts of various cell lines, using CUL4B antibody at 1:1000 dilution.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (MBS128200) at 1:10000 dilution.Lysates/proteins: 25ug per lane.Blocking buffer: 3% nonfat dry milk in TBST.Detection: ECL Basic Kit.Exposure time: 60s.



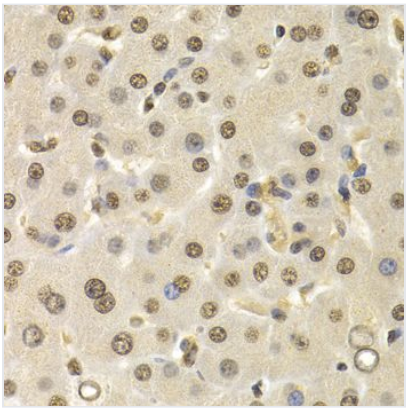
Immunohistochemistry (IHC) of anti-CUL4B antibody
Immunohistochemistry of paraffin-embedded rat liver using CUL4B antibody at dilution of 1:200 (40x lens).



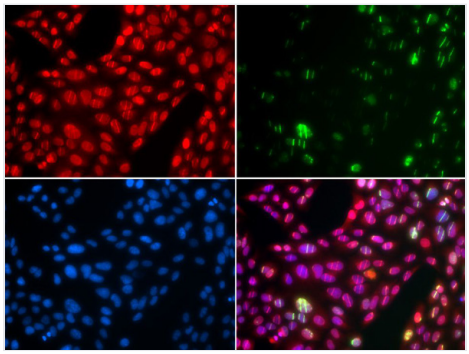
Immunohistochemistry (IHC) of anti-CUL4B antibody
Immunohistochemistry of paraffin-embedded mouse kidney using CUL4B antibody at dilution of 1:200 (40x lens).



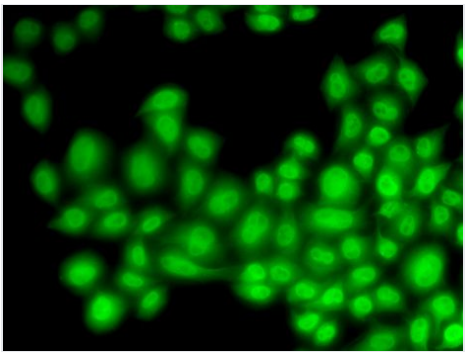
Immunohistochemistry (IHC) of anti-CUL4B antibody
Immunohistochemistry of paraffin-embedded mouse pancreas using CUL4B antibody at dilution of 1:200 (40x lens).



Immunohistochemistry (IHC) of anti-CUL4B antibody
Immunohistochemistry of paraffin-embedded human liver cancer using CUL4B antibody at dilution of 1:200 (40x lens).



Immunofluorescence (IF) of anti-CUL4B antibody
Immunofluorescence analysis of U2OS cells using CUL4B antibody. Blue: DAPI for nuclear staining. DNA damage by a UV-A laser.



Immunofluorescence (IF) of anti-CUL4B antibody
Immunofluorescence analysis of U2OS cells using CUL4B antibody.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CUL4B. It may not necessarily be applicable to this product.

NCBI GI #	296439468
NCBI GeneID	8450
NCBI Accession #	Q13620.4
UniProt Primary Accession #	Q13620
UniProt Secondary Accession #	Q6PIE4; Q6UP07; Q7Z673; Q9BY37; Q9UEB7; Q9UED7; B1APK5; B3KVX4; B7Z5K8
UniProt Related Accession #	Q13620
NCBI Official Full Name	Cullin-4B
NCBI Official Synonym Full Names	cullin 4B
NCBI Official Symbol	CUL4B
NCBI Official Synonym Symbols	SFM2; MRXSC; CUL-4B; MRXHF2; MRXS15
UniProt Protein Name	Cullin-4B
Protein Family	Cullin
UniProt Gene Name	CUL4B
UniProt Synonym Gene Names	KIAA0695; CUL-4B
UniProt Entry Name	CUL4B_HUMAN
NCBI Protein Information	cullin-4B

UniProt Comments for CUL4B	CUL4B iso1: Core component of multiple cullin-RING-based E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins. The functional specificity of the E3 ubiquitin-protein ligase complex depends on the variable substrate recognition subunit. CUL4B may act within the complex as a scaffold protein, contributing to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme. Plays a role as part of the E3 ubiquitin-protein ligase complex in polyubiquitination of CDT1, histone H2A, histone H3 and histone H4 in response to radiation- induced DNA damage. Targeted to UV damaged chromatin by DDB2 and may be important for DNA repair and DNA replication. Required for ubiquitination of cyclin E, and consequently, normal G1 cell cycle progression. Regulates the mammalian target-of-rapamycin (mTOR) pathway involved in control of cell growth, size and metabolism. Specific CUL4B regulation of the mTORC1-mediated pathway is dependent upon 26S proteasome function and requires interaction between CUL4B and MLST8. Defects in CUL4B are the cause of mental retardation syndromic X-linked Cabezas type (MRXC); also known as mental retardation syndromic X-linked type 15. A syndromic form of X-linked mental retardation characterized by severe intellectual deficit associated with short stature, craniofacial dysmorphism, small testes, muscle wasting in lower legs, kyphosis, joint hyperextensibility, pes cavus, small feet, and abnormalities of the toes. Additional neurologic manifestations include speech delay and impairment, tremor, seizures, gait ataxia, hyperactivity and decreased attention span. Belongs to the cullin family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Cell cycle regulation Chromosomal Location of Human Ortholog: Xq23 Cellular Component: nucleoplasm; cytoplasm; plasma membrane Molecular Function: protein binding; ubiquitin protein ligase binding; damaged DNA binding Biological Process: ubiquitin-dependent protein catabolic process; positive regulation of protein catabolic process; cell cycle Disease: Mental Retardation, X-linked, With Short Stature, Hypogonadism, And Abnormal Gait
Research Articles on CUL4B	**1.** these observations establish an important negative regulatory role of CUL4B on p53 stability.
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