For Research Use Only

CUL4A Monoclonal antibody

Catalog Number:66038-1-Ig Featured Product 5 Publications

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Basic Information

Catalog Number:
66038-1-Ig

Size:
150ul , Concentration: 1300 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG18089

GenBank Accession Number:
BC008308

GeneID (NCBI):
8451

UNIPROT ID:
Q13619

Full Name:
cullin 4A

Calculated MW:
77 kDa

Observed MW:
77 kDa, 88 kDa

Purification Method:
Protein A purification

CloneNo.:
1A7F12

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:20-1:200
IF/ICC 1:20-1:200

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB, IF, IP

Species Specificity:
human, monkey, mouse, rat, pig

Cited Species:
human, mouse

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 : LNCaP cells, HeLa cells, pig brain tissue, MCF-7 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells

IP : MCF-7 cells,

IHC : human heart tissue, human breast cancer tissue

IF/ICC : HepG2 cells,

Background Information

Cullin proteins assemble a large number of RING E3 ubiquitin ligases, participating in the proteolysis through the ubiquitin-proteasome pathway. Two cullin 4 (CUL4) proteins, CUL4A (87 kDa) and CUL4B(104 kDa), have been identified. The two CUL4 sequences are 83% identical. They target certain proteins for degradation by binding protein DDB1 to form a CUL4-DDB1 ubiquitin ligase complex with DDB. They form two individual E3 ligases, DDB1-CUL4ADDB2 and DDB1-CUL4BDDB2 in this process. CUL4A appeared in both the nucleus and the cytosol, suggesting a more complex mechanism for entering the nucleus. CUL4B is localized in the nucleus and facilitates the transfer of DDB1 into the nucleus independently of DDB2.

Notable Publications

Author	Pubmed ID	Journal	Application
Wan Wang	35799276	Stem Cell Res Ther	WB,IF,IP
Masashi Minamino	30100344	Curr Biol	
Ruiqi Yu	39138375	Cell Death Differ	WB

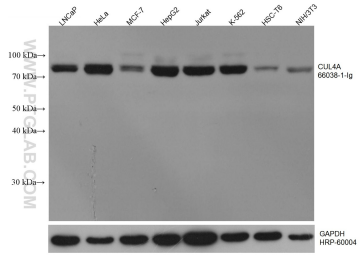
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

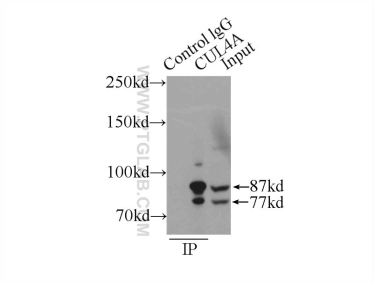
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

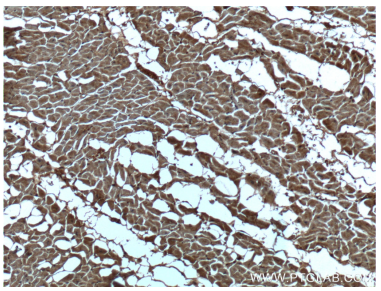
Selected Validation Data



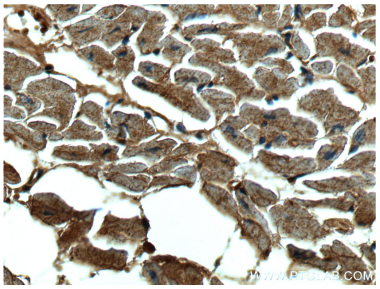
Various lysates were subjected to SDS PAGE followed by western blot with 66038-1-Ig (CUL4A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



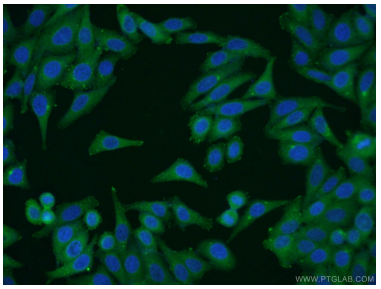
IP result of anti-CUL4A (IP:66038-1-Ig, 4ug; Detection:66038-1-Ig 1:500) with MCF-7 cells lysate 2800ug.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66038-1-Ig (CUL4A Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66038-1-Ig (CUL4A Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of HepG2 cells using 66038-1-Ig (CUL4A antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Mouse IgG (H+L).