For Research Use Only

CUL7 Monoclonal antibody

Catalog Number:67034-1-Ig Featured Product 1 Publications

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Basic Information

Catalog Number:
67034-1-Ig

Size:
2000 μg/ml

Source:
Mouse

Isotype:
IgG2a

Immunogen Catalog Number:
AG6943

GenBank Accession Number:
BC033647

GeneID (NCBI):
9820

UNIPROT ID:
Q14999

Full Name:
cullin 7

Calculated MW:
1698 aa, 191 kDa

Observed MW:
185 kDa

Purification Method:
Protein A purification

CloneNo.:
2E3G9

Recommended Dilutions:
WB 1:2000-1:10000
IHC 1:250-1:1000

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB

Species Specificity:
Human, Mouse, Rat

Cited Species:
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 : HEK-293 cells, HeLa cells, NCI-H1299 cells, HSC-T6 cells

IHC : human heart tissue,

Background Information

he cullin family proteins are scaffold proteins for the Ring finger type E3 ligases, participating in the proteolysis through the ubiquitin-proteasome pathway. Humans express seven cullin proeins: CUL1-3, CUL4A, CUL4B, CUL5, and CUL7. Each cullin protein can form an E3 ligase similar to the prototype Ring-type E3 ligase Skp1-CUL1-F-box complex. The Cullin-RING-finger type E3 ligases are important regulators in early embryonic development, as highlighted by genetic studies demonstrating that knock-out of CUL1, CUL3, or CUL4A in mice results in early embryonic lethality. CUL7 was originally discovered as 185-kDa protein associated with the large T antigen of simian virus 40 (SV40). CUL7-deficient mice exhibit neonatal lethality with reduced size and vascular defects. CUL7 presumably plays a role in the DNA damage response by limiting p53 activity. CUL7 mutations have also been identified in 3-Msyndrome and the Yakuts short stature syndrome, both of which are characterized by pre- and post-natal growth retardation but with relatively normal mental and endocrine functions, suggesting that CUL7 may also be crucial for human placental development.

Notable Publications

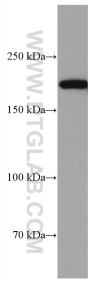
Author	Pubmed ID	Journal	Application
Dong Guo	39267786	Theranostics	WB

Storage

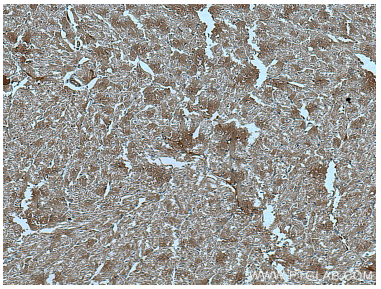
Storage:
Store at -20°C.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

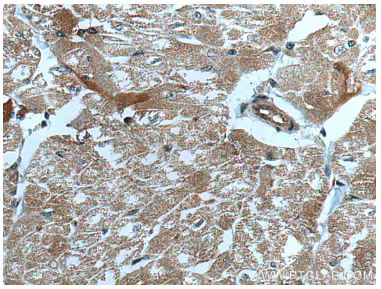
Selected Validation Data



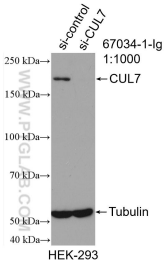
HEK-293 cells were subjected to SDS PAGE followed by western blot with 67034-1-Ig (CUL7 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 67034-1-Ig (CUL7 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 67034-1-Ig (CUL7 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of CUL7 antibody (67034-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CUL7 transfected HEK-293 cells.