For Research Use Only

CUL7 Monoclonal antibody

Catalog Number:67034-1-Ig Featured Product

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

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:
IHC, WB, ELISA

Species Specificity:
Human, Mouse, Rat

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

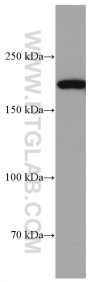
he cullin family proteins are scaffold proteins for the Ring finger type E3 ligases, participating in the proteolysis through the ubiquitin-proteasome pathway. Humans express seven cullin proeins: CUL1-3, CUL4A, CUL4B, CUL5, and CUL7. Each cullin protein can form an E3 ligase similar to the prototype 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.

Storage

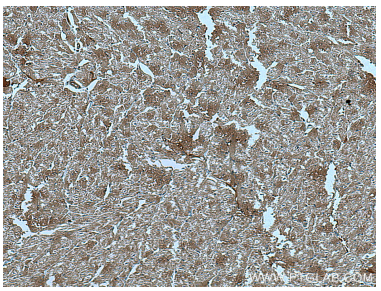
Storage:
Store at -20°C.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

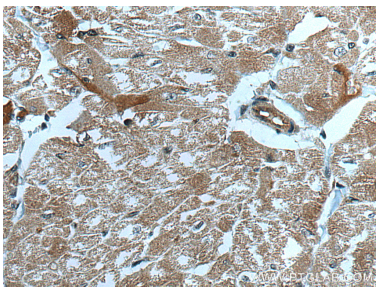
Selected Validation Data



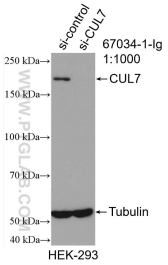
HEK-293 cells were subjected to SDS PAGE followed by western blot with 67034-1-Ig (CUL7 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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.